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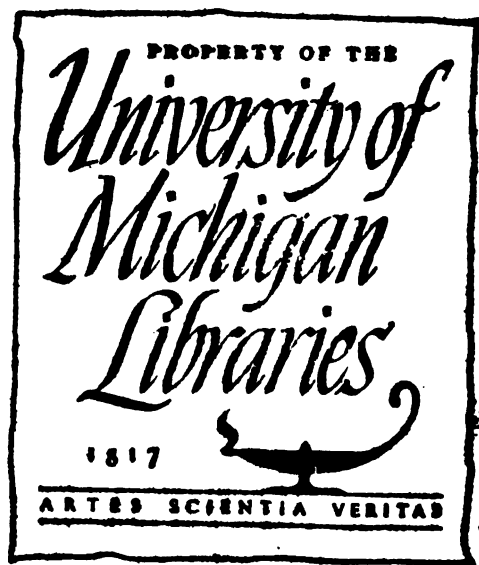
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I. MISCELLANEOUS PAPERS.

- I. *The Legal Protection of the Sentiments and Affections: A Lecture delivered before the Mechanics' Institute of New York.* By E. P. HURLBUT, Esq.

MAN is endowed with certain propensities which impel him to a prompt and vigorous defence of his person and his rights; and in the absence of a superior protection, he has always the right to defend himself. Laws for the protection of humanity emanate from man's superior nature, and therefore, whenever it is possible, they ought to furnish a full measure of protection, rather than leave any man to passionate and vindictive self-defence. The most perfect of human laws, and their most rigorous administration, will, however, always leave man exposed in society to aggression, which he may properly resist by force. The law cannot always shield his person from the ruffian's attack, although it might punish the aggressor after his mischiefs are perpetrated. It cannot secure his property from theft or embezzlement, although it may inflict penalties upon the offender. So that in the best ordered society man will have occasion to draw upon his combativeness and destructiveness, when these can avail him, to *prevent* injuries to his rights. One of the legitimate offices of these instincts, is the opposing of force as the means of preventing injury. If they go farther, either in or out of society, they offend the superior sentiments. Acting under the control of the moral powers, they work for *defence*, and not for *vengeance*. Taking into view the harmonious action of man's moral and intellectual, as well as his passionate nature, and giving the control to the former, man never could have had the *right of vindictive self-redress*.

Conscientiousness was ordained, under the enlightenment

of the intellectual faculties, to determine between the accuser and the accused—between him who demanded and him who withheld right. From his very constitution, as we have seen, man must exist in society—where he can always have an appeal for justice to his impartial fellow-men. They immediately sympathize with the injured, and are impelled by their moral feelings to redress his wrongs. If in a moment of excitement he exceed the limit of defence, and take vengeance, he offends against the moral feelings of his brethren, and wounds his own superior sentiments, so that he feels the agony of remorse, after they regain the just supremacy of his mind. Self-redress, then, by way of taking vengeance upon the aggressor, is not a natural right—but a natural *wrong*; and man in society does but obey the true law of his nature when he looks to the social body for the redress of injuries. In the *prevention* of wrongs, then, the animal powers of the individual may be properly exerted, while in the *redress* of them the moral powers of the social body must have exclusive sway.

But benevolence, not less than justice, is all-pervading in human society, and dictates the benign sentiment of mercy and good will to all the sensitive creation. It disposes man to desire the prevention of offences, as it shrinks from their punishment, and looks in mercy even upon the vilest offender. It infuses a spirit of philanthropy in the legal code, tempers justice with mercy, and sheds a tear for the victim of the offended laws. It would not, nevertheless, defeat justice, but would prevent the occasion for its exercise; and, under its blessed influences, the social body is stimulated to make provision for the prevention of wrong, and to inflict punishment only as one *means of prevention*.

But such is the nature of man, that an offence to any of his rights so disturbs the serenity of his mind, and its harmonious action, and produces such a mingled excitement of both his sentiments and his passions, that unless the laws afford him redress, he will take it upon himself to obtain it, and he will oftentimes execute *vengeance* upon the offender, which is the product of Conscientiousness, Combativeness, and Destructiveness, acting in combination. For in the act of self-redress, justice often arrays herself in a ruffian garb, and uses the assassin's weapons. Vengeance comes of enraged justice; and greater wrong may be done in the passionate redress of injuries, than in the perpetration by the first offender. But this wrong proceeds from the disturbed and inharmonious activity of man's innate faculties; and laws emanating from, and adapted to, the harmony of his mental forces, must provide for the exclusion of so great an evil in human society. How shall

this be done ? By a legal recognition of every human right, and guaranteeing to each, as far as possible, a full and complete measure of protection. Humanity will for ever cry aloud for the protection of her rights, and for the redress of injuries. And when human law fails to mete out *justice* to man, be not astonished if he take *vengeance* instead. Society claims the right to punish, in order to deter from crime ; when it fails to punish, the aggrieved party will be inclined to supply the omission ; but if while smarting under a sense of injury he act out this inclination, he will do that for which he himself will be punishable, and thus he will conceive himself to be the victim of *three wrongs*. The first comes from society, a wrong of omission in not protecting his infringed rights ; the second, an actual wrong from the individual aggressor ; and the third, the outrage of society, in punishing him for obtaining that redress for himself, which it had failed to afford him. He will conceive himself to be the victim of society, and not unlikely will be a perverse citizen ever after.

Let me illustrate this with a few examples. The law leaves the citizen perfectly unprotected from the rudest insult by simple speech. His truth, integrity, honour or courage, may be called to naught ; the honour of his wife or daughter may be openly impeached by the rudest assailant ; and thus his Self-esteem, Approbativeness, and feelings of domestic attachment may be wounded in the highest degree ; yet the law leaves him to take care of himself. Combativeness and Destructiveness, however, do not desert him, but rush to the aid of these wounded feelings, and inflict instantaneous personal chastisement upon the offender. An assault and battery is committed, and Justice now removes the bandage from her eyes, and beholds this as the first wrong !

She declares that no *mere words* can justify a battery, and that the man beaten has an action for his damages against him who smote him—and moreover, that so much does the law abhor bodily strife, and desire peace among men, that the battery is subject to further punishment as a misdemeanour, and that he who smote the rude and insolent accuser, must pay a fine to the state for the offence, and be imprisoned in a common jail for a period fixed by the same just law. How feels the prisoner now ! He very naturally wants to inflict chastisement upon the blind goddess herself, conceiving that *she* has done him far the greatest injury in the case.

But let us suppose a far more serious case of wrong ; that of a husband injured in the most sacred of the marital rights. He detects the destroyer of his peace, and kills him on the spot. This killing is pronounced manslaughter ; for which the

injured husband is condemned to the state-prison at hard labour for a term of years. But suppose that he refrains from killing at the instant, and challenges the author of his ruin to mortal combat. The coward and villain takes the challenge to the police, and the injured husband is arrested for merely sending the challenge, and condemned to prison as a felon. But suppose the wrong-doer to accept the challenge; they go to the field, and the husband speeds the bullet to his heart—he dies, and, in the eye of the law, he is a murdered man, and the broken-hearted husband is pronounced a wilful murderer, and expiates his offence upon the gallows! What ought he to have done? What only the law allowed him to do. He should have left his house with great equanimity of mind, as soon as he discovered the damning deed which stung him with the deepest agony; he should have abstained even from giving vent to his feelings by words, lest he should have used profane oaths—which the laws punish by a fine. He should have gone to a gentleman of the bar, coolly stated his case, and received for answer, that as there was no witness to prove the wrong, the law could afford no redress—but in case of a witness, then he could have his action and recover a COMPENSATION IN MONEY for this wrong! “Money—a world’s wealth!” say—“an universe of worlds!” would he not exclaim—“I’ll have none of it—I’ll murder him and die, for life has ceased to be a blessing now!” And yet by our law, money atones for this deepest and darkest of domestic wrongs; and when the offender shall have paid the sum ordained, he may go about at noonday, serene and calm, as a gentleman and good citizen! Why mock the injured in such a case by treating this wrong as one that can be atoned for by money? Retain this sort of redress, if you please, for that order of men who will stoop to receive it; but do not allow a wrong which destroys the happiness of a fellow-being for life, to pass with lighter condemnation than the least offence to the right of property. Our laws punish certain injuries to the latter right as felonies. The stealing of property to the value of twenty-five dollars is an infamous crime, and punishable by imprisonment in a state-prison for a term of years; and yet how slightly is man’s happiness affected by the injury thus redressed?

We have statutes for the protection of animals from cruel and inhuman treatment, making it a misdemeanor, punishable by fine and imprisonment; while human affections are left exposed to the deepest wounds, and the wrong-doer may walk abroad the companion and equal of judges and legislators, nay, may sit upon the bench himself, and be clothed with the holy

ermine of justice, instead of being condemned to the cells of a prison, to wear a felon's garb.

The peace of families is also left entirely exposed to other acts of profligacy. The parent may find the honour of a daughter lost; and the law which took its origin in a barbarous age, and which recognised in this no other injury to the parent than the loss of the daughter's services, affords him a compensation in money for that loss; to which may now be added something more, if the jury please, for the wounded feelings of the parent. Against the *form* of the remedy the injured party first revolts, and next against the idea of a compensation in damages. Those wanting all proper appreciation of the wrong, may perhaps be content with damages; but those whose sense of the injury is the keenest, scorn your legal remedy, and go unredressed by the law. In either event the wrong-doer escapes all degradation; and, after having done a felon's wrong, walks forth a gentleman. If his deed were made a felony, he would not fall below his victim.

Mr Chitty, in his learned and admirable work upon Medical Jurisprudence, notices a case of this character, where the defendant insultingly sent the L.1000 damages awarded by the jury to the injured father, by a livery servant, with his compliments, and that he would with pleasure pay him another L.1000, if he would send him his second daughter. If this wretch had been condemned as a felon, what servant would have worn his livery, or delivered his bitter taunts? And yet society consents to harbour such a man in her bosom, while she condemns the petty swindler to the dungeons of a prison! Nay, more—if the injured father should take such vengeance upon him as his feelings should prompt, he would become a criminal himself, and forfeit his liberty or his life, for yielding to the impulses of his nature in vindicating his honour and his happiness, where the law had failed to protect them.

If the social body leave any man unprotected in any of his rights, as to those rights and their vindication he must be left to his natural remedies. I do not contend that a man unprotected has the right to execute vengeance upon the wrong-doer: but I insist that it is a known fact that a large portion of mankind will be prompted by their natural impulses to do so; and it becomes a grave question whether men in society, having neglected a due measure of protection, have acquired the right to punish the individual who resorts to self-redress. It seems to me the social body can only punish him who redresses a wrong by an act of vengeance, when they can point to the law, and say to the offender, "Here was your redress; had you appealed to our laws, your rights would have been

fully vindicated—but having chosen vengeance when justice was within your reach, we condemn you.” The taking of vengeance is a moral offence, in the absence of any human law for the protection of rights; but I apprehend it is not an offence of which the social body can take any cognizance, but it must be left to the Creator’s laws.

It would follow, then, that society, in order to acquire the right to punish an act of self-redress, must first have afforded a due measure of legal protection to the right whose infringement occasioned the act of vengeance.

“As the state,” says Vattel, “does not permit an individual to pursue, with arms in his hands, the usurper of his fortune, only because he may obtain justice from the magistrate; so, if the sovereign will not allow him to draw his sword against him from whom he received an insult, he ought necessarily to take such measures, that the patience and obedience of the citizen insulted shall be no prejudice to him. The society cannot deprive a man of his natural right of making war against an aggressor, without furnishing him with other means of securing himself from the evil his enemy would do him; for in all those occasions in which the public authority cannot lend us its assistance, we resume our primary right of natural self-defence.” * * *

Wherever the social body neglects to protect the human sentiments and affections, it must leave the lacerated victim of another’s wrongs to wreak his own vengeance upon the offender; and if assaults, duels, and assassinations ensue, no statute can properly denounce its penalties upon the vindicator of his rights, and all that the courts can inquire into is, whether there was such a provocation as ordinarily produces the consequences which happened; if so, and such provocation was not punishable by law, then the law shall take no notice of the consequences! This would produce a dreadful state of society, but not a state much more to be dreaded, than one which allows the holiest sentiments and affections of man’s nature to be wounded with impunity, the most flagrant wrongs to be unprevented and unpunished, and yet denounces the severest punishments upon the man, who, smarting under a sense of the deepest injury, takes vengeance upon the wrong-doer.

I pray you not to misconstrue my meaning. I am not the advocate of either of these conditions in society, but most heartily condemn both as an entire departure from the true rule of social organization.

My appeal is for humanity. I demand for it full and perfect protection by the laws of society; and I demand that the

human sentiments and affections shall have a measure of protection commensurate with their dignity and importance to man's happiness ; and I have only designed to point out the injustice of society, in neglecting a just and general protection to all the rights of man.

" Although it will be admitted," says Mr Chitty, " that the true object of the law ought to be security to individuals of the full enjoyment of those endowments with which the Almighty has blessed mankind ; yet the English law is singularly defective in the protection of the natural passions and feelings from injuries. It in general interferes only where there has been a *VISIBLE* bodily injury, inflicted by *FORCE* or *POISON* ; while it leaves almost entirely unprotected the whole class of the most malignant *mental injuries and sufferings*, unless in a few cases, where, by descending to fiction, it sordidly supposes some pecuniary loss, and sometimes, under that mask, indirectly, and contrary to its own legal principle, affords compensation for wounded feelings.

" Thus a parent cannot *in that character* sue for an injury inflicted on his child, and on his own domestic happiness ; nor can he punish the silent seducer of his daughter, occasioning his most agonizing mental sufferings, and her ruin, unless the facts will sustain the allegation that the daughter was a *servant* of the father, and that by reason of the seduction he lost the benefit of her services. Nor is there punishment for many *verbal slanders*, undermining the character of the person calumniated, and occasioning the most dangerous illness, or even death."

Mr Chitty further notices that the killing of a person by fright or alarm is not a felonious murder, but at most a misdemeanour ; and that in point of law it is not murder to work on the imagination so that death ensue, or to call the feelings into so strong an exercise as to produce a fatal malady ; and he concludes that the British law is entirely defective in not punishing, corporally, those who wilfully occasion injuries to the *passions, emotions, affections, or feelings* of another.

Many of you, doubtless, remember a most distressing case of suicide, by a young gentleman of this city, some two years ago ; who rushed to the top of his house, which was three stories high, and precipitated himself thence upon the pavement below, thus occasioning his awful and instantaneous death. A few weeks before this most melancholy event, he was in perfect health, mingling with his fellow-citizens, having their highest respect, and the attachment of many warm and devoted friends. His domestic character was a model of the most affectionate

kindness and perfect devotion to the happiness of a mother (his only surviving parent), and his brothers and sisters. His charities were liberal; no worthy applicant for aid ever went away empty from his door. He was generous even to a fault. His integrity was of the highest order, and he preserved the most unsullied honour; it was his soul—his life. In fine, he was one of the noblest young men I have ever known, and one whose memory I shall always cherish to the latest hour of my life. I would that it were divested of the story of his unhappy fate!

A few days before his melancholy death he called upon me under great anxiety of mind, and stated to me, more as a friend than as his professional adviser, the details of a conspiracy formed to extort money from him, by several abandoned people in this city, one of whom had sought his acquaintance to ask charity, and who had received pecuniary relief at his hands.

The conspirators had a scurrilous paper in their interest, and a threat of a libellous publication had been made in its columns. This was his concern at the time of his visit to me. I inquired into the whole matter with great interest and anxiety. I know the truth of his case, and I know to a moral certainty that there was not a shadow of just foundation for the least censure upon his fair fame. I advised him to treat the conspirators with utter contempt, and to pay them not the least attention. He soon after received from some lawyer, who read the laws but to violate their spirit, and whose moral nature was attuned to the work of mischief, further intimation that the conspiracy was to be consummated by a suit at law. He brooded over this matter till sleep and rest forsook him. The scurrilous print came out with its brutal libel, and its victim fell beneath its stroke. When he next called upon me, which was the day after the publication, I think his whole appearance was that of a maniac, and his wild exclamations, his intense mental suffering, amounting to the most dreadful agony, baffled description. Alas! I could not soothe his wounded spirit—he was taken to his home, and when I inquired after him at the next opportunity, I learned his awful death. This man was murdered, and his murderers live unmolested by the law.

“If,” says Mr Chitty, “legislators had sufficiently considered the connection of mind with external objects, and that the miseries and sufferings of the mind may be infinitely greater than those of the body, adequate punishments would have been provided for many mental injuries, which at present can only

be visited by the censure of mankind, or, at the most, by inadequate discretionary punishment, limited to fine and imprisonment.”*

The reflections of this profound jurist upon the British law are equally applicable to our own. The same defects exist in our legal code; the most sacred rights of humanity cry out in vain for protection to either British or American laws. Nay, more, the legislators of both countries have hitherto treated with derision and contempt the petitions which have been presented to them upon the subject of laws for the protection of human sentiments and affections. There were presented to the legislature of this state, at the last session, sundry petitions from ladies in one or more of the counties, praying that the grossest violation of the marital rights, and the vilest infringement of the domestic peace, might be punished as crimes. These grave legislators ill concealed their mirth at this outbreak of humanity. It was a capital joke, and made them merry for a season. If these ladies had presented a petition, praying for further protection of their wardrobes from theft, a bill for that purpose would have been passed by this gallant legislature. But as they sought for protection for domestic love and peace, for noble pride and kind affections, for honour and happiness, these Solons derided the application. They could appreciate silks and laces, and yet deride the holiest sentiments of the being they adorned—“they could pity the plumage—and forget the dying bird.”

Let us now examine more minutely some of the rights of man arising from the sentiments and affections of his nature, with a view to the ascertainment of what is a proper measure of legal defence and vindication. And, first, the marital rights. The sexes are born nearly equal in point of numbers, and this alone creates a natural necessity for their uniting in pairs. But it would go no farther; it would not determine the permanency of that union, but leave it to be dissolved at the mere option of either of the parties, upon the slightest occasion. The law of nature, however, has not only ordained the pairing of the sexes, but the permanency and sacred inviolability of the union. It is true that the instincts which lie at the foundation of it, are shared by man in common with all the animal creation; but in man these instincts are strengthened and consecrated by high and noble sentiments, which are wanting in animals; and we have seen that the most sacred rights emanate from these sentiments, and among the chief of these are the marital rights. Offspring result from the marriage union. Mankind

* See 1 Chitt. Med. Jur. 320-327.

have a natural love of offspring—heightened by holy hope, and just pride, and benevolent affections. The parents have to deal also with sensitive, rational, and moral beings in their children, whose fate is so connected with their own, as that they are bound to preserve inviolate that union which has called them into being, and whose continuance alone can promote their happiness. Man is denied his animal freedom in this regard ; it is subject to his moral and superior nature, and it is well that it is so. Moreover, such is the nature of human affection, that a judicious attachment is strengthened by indulgence and time, so that a separation by death, even, is among the severest trials of the afflicted. If so great distress come from the act of Providence, to which man is disposed, by his reverence and awe, to submit with meek and pious endurance, what must he suffer, whose domestic affections are wounded by that worse deprivation, the moral death of the being whom only he loved ! No sentiment of veneration and submission to the Creator's laws now soothes his wounded spirit ; but his pride, his honour, and his sense of justice, are rudely lacerated, and his entire moral nature revolts at the wrong. Marriage is an institution of nature. The sacred exclusiveness of domestic love is demanded by the laws of the human mind, and hence the right to its inviolability. The human legislator cannot plead that he instituted the married state, and may therefore notice, or disregard, its claims, as he shall choose. He is bound to regard it as the institution of nature, and to vindicate its rights by appropriate laws.

Consider next the wounds inflicted upon parental feelings. Philoprogenitiveness and Adhesiveness cling to the child. Benevolence showers blessings around it, and Hope and Pride look forward with exultation to its advancement and success in life. The object of so much attachment, and who promises so much, attains to womanhood—sweet, confiding, innocent, and beautiful ; but falls the victim of such vile art and falsehood, as was so foreign from her nature, that she was not prepared for its encounter. The parent is stung with the deepest agony. Every sentiment and affection which before derived pleasure from her existence, is now a source of torment to him. He was before happy, he is now miserable ; his rights therefore have been invaded, and he justly demands protection from the law.

We have seen that a sense of Pride and Love of Approbation are innate in man ; these may be wounded by malicious detraction and insult, and this will disturb the peace of the injured individual. He therefore demands, very properly, legal protection for these sentiments.

I cite these instances for the purpose of leading the way to ;

a discussion of the species of redress which the law ought to afford for injuries to the sentiments and affections. The right of property is fully acknowledged by our laws, and in general is well protected. A man injured in this right has secured to him a civil action for redress, in which he recovers a compensation in money for the wrong done him ; and in cases of injury by theft, embezzlement, and, in some cases, of fraud, and imposture, the law has made the offence criminal, and punished it as a felony. One would suppose that a right so sacredly guarded by the law must have a higher and holier origin than others, and that its protection was of higher importance to man's happiness than those rights which were entirely neglected. Whence then the origin of this right ? It emanates from the instinct to acquire. Man has a natural desire to acquire and keep property. This instinct is possessed in a slight degree by some of the animal tribes, and it does not aspire to the dignity of a sentiment. It, however, calls the sentiment of Self-esteem to its aid, and then says, " This is *mine* ; and because it is *mine*, it is better than if it were *thine* ; and *I* am better than thou art, because I have it and thou hast it not." Now, if you deprive this man of this thing, you become a felon ; but if you only take away his wife, or degrade his daughter, or destroy his character, you are still a gentleman in the eye of the law !

The person also is greatly favoured in our jurisprudence. Not only its utility but its symmetrical beauty has met with a most favourable consideration. If you cut off a man's ear, or slit his nose, or otherwise maim him, you are regarded as a felon ; but you may so lacerate his feelings as to destroy his reason, and escape without legal notice. An ear or nose is more valuable, says the law, than the reasonable faculties. Nay, so jealous is the law of injury to the corporeal man, that you may not shake your feet at him within striking distance, though you touch him not, but forthwith you will be arrested and carried before a magistrate for the offence ; and if he himself does not call you a coward, vagabond, and knave, he will be regarded as uncommonly civil and reserved upon the occasion !

Now, all human rights emanate from the natural sentiments and desires of the mind ; they have, therefore, the same source, but it does not necessarily follow that they enjoy the same rank and dignity ; some are more sacred and important than others to human happiness.

Every member of man's physical frame is of some degree of importance in the exercise of its corporeal functions ; but he can bear the loss of one with less sacrifice than another, because it

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Every member of man's physical frame is of some degree of importance in the exercise of its corporeal functions ; but he can bear the loss of one with less sacrifice than another, because it

is not of equal importance to his bodily strength or activity. The loss of his finger is not equal to the deprivation of his hand, nor the loss of his arm to that of his leg. It becomes us, then, to fix the grade of man's intellectual powers, and to determine the relative rank and dignity of the various faculties, dispositions, and sentiments of the human mind. The supremacy will be conceded to man's moral nature; his intellectual faculties are next in rank, but wholly subsequent to it,—as are also the animal feelings.

Man's highest enjoyments consist in the gratification of his sentiments. His secondary pleasures arise from the indulgence of his animal feelings, under the restraint of the sentiments and the intellect. The source of his highest enjoyments, when disturbed or wounded, becomes the source of his most poignant suffering. He can bear pecuniary easier than domestic deprivation, an injury to his person with less sacrifice than an injury to his character. Fraud and deception offend him more than theft, and obtaining by false pretences more than robbery. He can endure hunger and want easier than the loss of his good name, and will sacrifice the peace of his body for his peace of mind. He will lay down life itself for freedom, truth, or justice, and enlist all the powers of his nature in the service of its benevolence. He will spend his fortune to satisfy his love of praise, and devote his life to gratify his pride and ambition. Nay, he will deny himself the entire gratification of the lower propensities, unless their indulgence can proceed under the sanction of his moral sentiments. If this be so, ought not the law to recognise these gradations of nature, and to award its protection according to their demands?

Injuries to the sentiments and affections, then, ought to be regarded as criminal offences, and be punishable according to their degree of moral turpitude; and the conviction of the offender in any of these cases should be a moral stigma upon his character. In the most enormous of these offences, such as those most deeply affecting the marital rights, and domestic love and peace, the law ought to pronounce them felonies, and punish them as such; as also those lacerations of the sentiments which result in the wreck of human reason. And it seems to me that all idea of pecuniary compensation for this class of injuries ought to be banished from the mind. Slander and libel which wound the sentiments only, and do not directly injure a man's pecuniary interest, ought also to be treated as criminal offences, and the civil action for pecuniary compensation ought to be abolished altogether. The rule which I contend for is this—when the injury is an offence to the moral feelings or affections, it should be treated as a crime and as such only.

The idea of bartering a man's moral nature for money, of enduring so much mental agony for so many dollars, is utterly degrading to humanity. Money is not the standard by which to estimate moral worth or human happiness. But where the offence is against the right of property, the extent of the injury can be measured by this standard, and a compensation be made in money. Such injury may also be a moral offence; and, when so, should be treated as a crime.

This would abolish the civil action of adultery, the action for debauching a daughter, and the action for slander and libel, except where the words published occasioned a direct and immediate pecuniary injury. It would abolish the action of assault and battery except where the bodily injury was such as to occasion a pecuniary loss, and it would substitute criminal punishment as the sole measure of protection and redress. All fraud and false pretences which injured another's right would be regarded as criminal; and if they produce pecuniary loss, the civil action would also be retained for redress in damages. The rule, in fine, would be, to treat all offences against the sentiments and affections of man's nature as moral wrongs, and to lay all atonement by money for injuries to human rights entirely out of view, except where the injury affected the right of property directly.

This would prevent and redress moral wrongs by moral means, and award for pecuniary wrongs their only appropriate remedy. What! shall a man's whole moral nature be grossly outraged and lacerated by the vilest wrong, and the law deal out a bait to a mere instinct by way of atonement and satisfaction? Suppose Self-esteem, Approbativeness, Adhesiveness, Benevolence, and Conscientiousness, to be raging under offence and injury, and you soothe them by gratifying Acquisitiveness! As well might you, when Acquisitiveness itself was outraged by an injury to property, attempt to redress the wrong by gratifying the love of music, and give solemn judgment in your courts that the defendant should play for the plaintiff some of his favourite tunes.

It may be objected that there is a vast disparity in the extent and seriousness of the various injuries to the sentiments and affections, according to the malignity of the offender, the sentiment or affection which should be wounded, and the organization and external condition of the aggrieved person; and that therefore it would be difficult, if not impossible, to frame a code of laws which should afford the required recognition and protection of these rights, without endangering the rights and liberty of the accused. I answer, that the laws already recognize and afford protection to rights where the same dif-

ficulty exists ; and what has been safely done in one case can be done in another of the same nature.

The right of life itself is protected by our statutes, which declare that the destruction of human life may be either murder, punishable by death ; or manslaughter, punishable by imprisonment in a state-prison for a long term of years ; or manslaughter, punishable by a shorter term of imprisonment ; or the same offence, punishable by imprisonment in a county-jail, or by a fine only. And cases are declared in which the taking of human life is either justifiable or excusable homicide, which of course are not punishable at all.

Now the punishment for the taking of human life is not regulated by the mere fact of the destruction of life ; for if it were, there would be but one offence, and one punishment : but the circumstances attending each case are considered, and the crime takes its character and meets its punishment from the degree of moral turpitude manifested in its perpetration. We have seen that every man has an innate love of life—in one, this intuitive attachment to life is much stronger than in another, and yet the law does not attempt to measure the offence of man-killing by the amount of the instinctive attachment which was violated by the act of killing. The law recognizes the instinct and the right, and protects it whether it be strong or weak. The killing of a human being who should be so disgusted with life, as that he would have committed suicide if he had not been murdered, is as much a crime in the eye of the law as if the deceased had the most ardent attachment to life. So also the life of the humble is as sacredly protected as that of the great.

The same holds true of the right of property. The law regards the right alike, and its violation as the same offence, whether the owner was a miser or philanthropist, whether he had much or little. The offender who steals from a man with large Acquisitiveness, commits no greater offence than when he steals from one with a small instinctive love of property. The offence is against the right, and the means of prevention and punishment are to be graduated according to the degree of moral turpitude manifested by the offender. Accordingly, he who steals a loaf of bread is not punished to the same extent as he who takes hundreds of dollars. So also the law has already distinguished between various degrees of forgery, and created several distinct grades of this crime, and awarded various degrees of punishment. The same may be said of the crime of arson. I am not required to shew that these gradations, or any of them, are correct ; but I cite these instances to shew—not only that by our law at present there are recog-

nised several distinct crimes, from those meeting with capital punishment to the lesser sort, punishable by slight imprisonment—but moreover, that offences against the same right are graduated, and meet with different degrees of punishment.

Suppose, then, the law should declare seduction to be a moral offence of which it would take cognizance; that if the victim of it was under a certain age, and it was effected by a pledge of marriage, it should be punishable by imprisonment for a certain term of years; if of mature years, and the circumstances were less aggravating—with a lesser term—leaving the jury to find the degree of the crime as it should be defined by law; and have the punishment for that degree fixed and certain. No greater difficulty could be encountered here than legislation has already overcome, in cases of homicide, arson, forgery, and theft.

So in cases of slander. Written slander, or libel, is now regarded, by law, as exhibiting greater moral turpitude, and as more to be dreaded, than verbal slander. The former is indictable as a misdemeanour now, while the latter is not, but is the subject only of a civil action for damages. Would there be any difficulty in pronouncing them both to be criminal offences, and graduating their punishment according to the degree of moral turpitude evinced in their perpetration?

This much the law could do at any rate; it could define what should be the first degree of any moral offence, and could fix its certain punishment; and it could declare that all other like offences should fall within either a second or third degree, in the discretion of a jury who should weigh the circumstances of each case; and the punishment for these degrees could also be graduated and fixed by law. This would take all arbitrary discretion from the courts, and leave the accused in the hands of a jury of the country, coming from the body of the people, and properly representing the just sentiment of an enlightened and virtuous community.

I perceive no insurmountable difficulty in the practical application of the principles of legislation, for which I have striven in this discourse. They at least invite candid investigation. Humanity pleads for their adoption; the noblest sentiments of our nature impel us to demand their consideration in the halls of legislation; and I have yet to be convinced, that He who ordained the pressing demands of the human sentiments and affections, and conferred upon man intellectual powers to subserve them, has been so sparing of the latter endowment, as that, how hard soever he shall strive, his reasoning powers will fail of securing an adequate measure of legal protection against the vilest wrongs which one human being can inflict upon another.

II. *Thoughts on Temperament.* By CHARLES CALDWELL, M.D.*

Although, in the following essay, the author very earnestly endeavoured to express himself with entire perspicuity and definiteness, he has reason to know that his views, as there expounded, have not been, by every one, correctly understood. On the contrary, so erroneous has been the construction which they have received from several individuals of high standing in science and letters (with some of whom he has conversed, and learnt the opinions of the others through authentic channels), that, in justice to his subject, as well as to his readers and himself, he deems it essential to prefix, to the present edition of his essay, a preliminary disquisition, to prevent it, if practicable, from being again misinterpreted.

Owing to some form of faultiness in his style, or of inattentiveness in readers, or perhaps to an unfortunate confederacy of both, the author has been supposed to rest his theory of temperament *exclusively* on the predominance in size and power (single or united) of those great ruling organs of the body—the brain, spinal marrow, and nerves—the viscera of the thorax—and the viscera of the abdomen. This, however, is a mistake, as will presently, he trusts, satisfactorily appear.

Instead of being unnecessarily restricted in his exposition of the subject, the author, when his sentiments shall have been correctly apprehended, will be found to have constructed his theory of temperament out of materials derived from a two-fold source—the size and power of the organs just specified—and the relative amount of certain proximate elements which enter as well into the composition of those organs as into that of every other part of the system. And though he attributes to the former of these sources the highest degree of influence in the formation of temperament, he regards the latter (and has so expressed himself) as no inconsiderable auxiliary in the work. By the brief analysis of the matter, on which he will enter without further preface, he hopes to render his views so clear and definite, as to prevent them from being again mistaken or held doubtful.

The human system is composed of a number of organic tissues, serving in the capacity of proximate elements of larger

* It having been recently in contemplation to republish, in London, an Essay on Temperament published some years ago in the United States, the following paper was intended to be prefixed to it, as a preliminary disquisition. The design to republish, however, having been abandoned, the disquisition, in its original form, is submitted to the perusal of the public, and left to its fate, without further remark.

and more compound organs ; and these elementary parts differ from each other, not only in substance, structure, and function, but also in vitality, activity, and power. In the composition of the bodies of different individuals those tissues exist in different proportions. And according as one or more of them predominate in quantity, are the constitution and character of the person of whose body they make component parts. To illustrate this statement by a few specifications, containing, in a special manner, a succinct account of some of the elementary tissues, to which allusion has been made.

Of these the osseous, cartilaginous, and fibrous, are comparatively of an inferior order. Possessing as they do but a very limited degree of life, they contribute but little to either the production or the modification of character. They serve as mere machinery, to be operated on, and thrown into action, by other parts superior in material, organization, and endowment, and therefore correspondingly in power and standing.

Of the cellular, serous, and mucous tissues, the same is true, though in a more limited degree. So is it of every other structure whose life and functions are little else than vegetative. Though indispensable as elements in the composition of the body, and therefore essential to health and well-being, those tissues are feeble in their bearing on the formation of character.

The tissues which act the most important part in forming and modifying the constitution and character, are the muscular, the sanguiferous, and the nervous—the last including the brain and spinal marrow. The muscles most influential in their connexion with temperament, are the heart, and those which subserve immediately respiration and digestion. Of these, the chief respiratory muscles are the intercostals and the diaphragm ; and the digestive are those that enter into the structure of the alimentary canal. In the production and modification of temperament, the lungs are also, as will appear hereafter, though somewhat indirectly, yet very peculiarly important in their agency. They are deeply concerned in *making* the blood, and exclusively so in *endowing it with life*. And, in the course of its circulation, that fluid again, especially the arterial portion of it, imparts life, and vigour, and efficiency to every solid belonging to the body. Hence an organ, if deprived of it by ligatures on its arteries, or by their obstruction in any other way, immediately perishes ; and hence the sudden and inevitable fatality of a profuse loss of blood.

From these considerations it is obvious that the agency of the sanguiferous tissue in the original formation of tempera-

ment, and in the changes which it subsequently undergoes, is important and striking. I say, "the changes which it undergoes;" for in no individual, at any period of life, is temperament *positively stationary*. From infancy to old age, its changes, though usually gradual and slow, are notwithstanding incessant.

Of all the organic structures that enter into the composition of the body, the nervous is pre-eminently the master-tissue—of the highest order, I mean, in vitality, power, and function. In the entire range and bearing, therefore, of its influence on temperament, it is paramount to either of the others singly, if not to the whole of them united. Without it man, though in all other respects the same as at present, would be inferior in standing to the insect or the worm—so true is it that we are only what our *organization* makes us.

Next to the nervous, in its influence on temperament, is the sanguiferous tissue. Even the nervous itself is essentially dependent on it for all it possesses of power and efficiency, and even of life; for, as already intimated, without a sufficient supply of arterial blood, every organ of the body—the brain not excepted—would fail not only in action and vigour, but in *vital existence*.

Conformably to these views of the subject, which are believed to be themselves in strict conformity with truth and nature, it is easy to account for the formation and being of the nervous and sanguineous temperaments. They are simple in their composition, and therefore in their constitution and character easily understood. As their names import, they arise severally from the respective predominance of the nervous and the sanguiferous tissues, and possess, of course, endowments corresponding to the nature and attributes of those two elements of animal organism.

But there exist two other temperaments, accounted also original and simple, the constitution of which is but little understood—perhaps I should say, not understood at all. They are the *bilious* or *choleric*, and the *phlegmatic* or *pituitary*; the former distinguished by the attributes of active energy, vigour, and endurance under excitement, exertion, and toil, which it imparts to its possessors; the latter by a condition in no small degree the reverse of this—a condition unaccompanied by any elevated and efficient qualities, corporeal or mental.

Were the question proposed, "What are the natural elements or organic constituents of these two temperaments?" to render an answer intelligible and satisfactory would be a

difficult task. As far as my knowledge of the matter extends, such an answer is yet to be framed.

The human organism contains no tissues which, either singly or united, or mixed in any known or supposable proportions, are alone calculated to give rise to two such temperaments or states of constitution. A preponderance or deficiency of neither nerves nor blood-vessels, nor of both combined, can produce them. Nor can they be the product of a preponderant or deficient amount of muscle, bone, or tendon, nor of cellular, mucous, or serous membrane.

The question, then, respecting the composition of the choleric and the phlegmatic temperaments remains unanswered, and presents itself as a suitable subject for farther and stricter observation and enquiry. And every sound physiological fact and principle direct that the scrutiny be confined exclusively to the solids of the body; for, as already alleged, (the blood alone excepted) none of the fluids has any agency in the formation of temperament. Of what is called the nervous fluid we have no knowledge; and to contend that bile, or phlegm, or mucus, acts to such an effect, is to trifle with the subject, or to manifest in relation to it a degree of ignorance which had better be concealed. Those fluids are but the *functional products* of the solids, and can do no more toward the creation of temperament than the gastric or the pancreatic liquor, or than the tear that trickles from the eye, or the matter of perspiration which exhales from the skin.

To shed on the subject of the choleric and the phlegmatic temperaments the light that is essential to a competent knowledge of them, minute anatomy has not yet attained to the requisite perfection. It has not yet sufficiently developed every thing that is involved in what may be called *radical* or *molecular* organization; nor has it disclosed to us the differences that may and probably do exist in the compactness and solidity of the globules composing the primitive fibres of our bodies. Of course, the differences that prevail in the tension, firmness, strength, elasticity, and general condition of the fibres themselves, are equally unrevealed by it.

In the midst of this unfortunate want of facts, we must either resort for information to analogy, or confess our ignorance, and remain silent on the subject. Though the latter alternative is *certainly* the *least hazardous*, and perhaps, also, the most consistent with a spirit of wholesome and rigid philosophy, I shall notwithstanding, on the present occasion, make choice of the former. To the attention of the reader, therefore, the following analogical remarks are submitted.

The effects of dryness and tension on a drum-head, the

strings of a violin, the wires of a harp, and on other elastic and sonorous bodies, are known to every one. So are the effects of a condition in such bodies the contrary of this—I mean of a humid and lax condition. In the *former* case, the bodies are full of elasticity, activity, and of what may be figuratively called vigour; and are therefore prepared for the emission of sound, and the production, under suitable regulations, of “spirit-stirring” music. But not so in the *latter*; they are there inactive and unsonorous, lifeless and uninteresting—they possess no sort of efficiency beyond that of common dead matter. Such is the doctrine; and its analogical applicability to the subject I am considering must now be attempted—with what degree of success or plausibility, it is the province of the reader to judge for himself.

That in persons possessing what is called the bilious temperament, the muscles, and such other solids as can be sufficiently examined, are remarkable for their solidity, firmness, and comparative lack of moisture, will not be denied; and such persons manifest in action unusual vigour and energy, and a corresponding degree of endurance under high excitement, hardship, and toil. To employ an expression rather common and homely than classical and elegant, but strong in its meaning and well understood, they are “tightly knit” in their entire organism—the bones themselves, perhaps, not excepted. All other things being alike, therefore, they are superiorly fitted to be pioneers and labourers, combatants and fatigued men. But the same solid, tense, and compact condition of fibre which gives them unusual muscular vigour, endurance, and efficiency, confers a like superiority on their nerves and brain. Hence, when the latter organ is large, and its developments favourable, and when, in addition to this, it is thoroughly improved by a suitable education—under these circumstances such persons cannot fail to be remarkable for their talents and mental achievements. They are men of severe and persevering study, and ample scientific attainment; or they are distinguished in the direction of practical affairs.

As relates to the phlegmatic temperament, it presents a condition of things in most respects the reverse of this. In those who possess it, the fibres of the body are evidently lax; the globules which form them are no doubt deficient in solidity and firmness; the skin, muscles, and other solids, are flaccid and soft to the touch; and the entire organism superabounds in fluids, especially in some sorts of secreted and aqueous fluids, but not in blood—certainly not in *arterial* blood. And this moist and enfeebling condition prevails in the brain and

nerves, no less than in the other organs of the body. Comparatively, the whole system is overwhelmed in a plethora of lifeless fluid. The issue is plain: a general unfitness for high and vigorous action exists in mind as well as in body. Be the cerebral development, therefore, and the education and training, what they may, the mental faculties are of an inferior caste, and all sorts of mental action exceedingly moderate, if not imbecile in character.

From the foregoing considerations it would seem, that what are called the bilious and the phlegmatic temperaments are the result of a condition of things of a nature altogether different from that which gives rise to the other temperaments. The bilious appears to be the product, not of a want of balance between any given parts of the system, whether solid or fluid, but of a state of unusually elevated tension and tone of all the solids. And the phlegmatic temperament arises from a contrary state of the same parts—a deficiency of tensility and tone in the whole of them. Although it has been said that, in the phlegmatic temperament, there exists a want of balance between the solids and the watery fluids, the latter being excessive in quantity, that is one of the *effects* of the temperament, not its *cause*.

But, as already intimated, my object in preparing this exposition is not so much to settle the philosophy of temperament, as to shew that I do not, as I have been alleged to do, derive its existence and character exclusively from the size and predominance of certain leading organs of the body. As heretofore stated, I derive temperament from a twofold source. I include in my views of it a predominance, and a governing power, of elementary tissues, as well as of the larger and more compound organs, which they contribute to form.

To an unbalanced condition of certain portions of the large anatomy of the system, I add a similar condition of particular kinds of small and elementary anatomy. And the influence of these latter portions in modifying the constitution by the formation of temperament, is the more forcibly exhibited by their being collected into large masses, in the form and character of abdominal viscera, thoracic viscera, and brain. When the digestive not only predominate in size, but also contain a predominant amount of blood-vessels or nerves, or of both united, they are the more powerful in their *functional action*—and the reverse. If their supply of blood-vessels or nerves, or of both, be small, that action is correspondingly feeble. Of the heart and the respiratory organs the same is true. And the brain, whether large or small, is augmented

in power by being abundantly supplied with well vitalized arterial blood, through the instrumentality of large arteries. To these several attributes add solidity and strength, high tension and tone of fibre, and the functional power may be accounted complete.

PARIS, July 5. 1841.

III. *Norfolk Island—Reform in Convict Treatment.**

The following letter describes, in simple but touching language, the partial results of a great moral experiment, and will be read, we think, with thrilling interest. It is something to have practical proof that, in the very outcasts of our species, there are elements of good on which improvement may be engrafted; and it is something to know, that the greater part of the suffering and wretchedness inflicted on criminals, under an idea that it is essential to the safety of society, may be dispensed with, not only without any loss, but with much positive advantage.

Norfolk Island is about 15 miles in circumference, and lies about 1000 miles east of New Holland, in latitude 28°. It was selected as a penal station for the very worst class of convicts, on account of its great distance from any inhabited land, and its steep and rugged shores, which render access and escape very difficult. The number of convicts seems to be about 600 at present; but we find that they were twice as numerous in 1837. They work in irons, and are employed in what is considered very hard labour in that climate, cultivating land with the hoe. It is described by the superintendent as "incessant and galling." If they perform their assigned tasks they receive a pound of bread and a pound of meat per day; if not, they are fed on bread and water, and disobedience of orders, turbulence, or other misconduct, is instantaneously punished by the lash. The Committee on Transportation which sat in 1838, of which Sir Robert Peel, Lord John Russell, and Sir William Molesworth were members, describe the colony in their report in terms which might be fitly applied to Pandemonium. "The condition of the convicts (they say) has been shewn to be one

* This article is extracted from the *Scotsman* of 29th September 1841. We happen to know that the writer of the included letter from Norfolk Island enjoys ample means of information, and is worthy of perfect reliance. Captain Maconochie, who, it is well known, is an adherent of Phrenology, has derived much aid from its principles in treating the convicts under his charge. The results are extremely gratifying.—EDITH.

of unmitigated wretchedness." According to Chief Justice Forbes, "the experience furnished by the penal settlement has proved that transportation is capable of being carried to an extent of suffering *such as to render death desirable, and to induce many prisoners to seek it under its most appalling aspects!* He had known many cases in which it appeared that convicts at Norfolk Island had committed crimes which subjected them to execution, for the mere purpose of being sent up to Sydney." "He believed *they deliberately preferred death*, because there was no chance of escape; and they stated that they were weary of life, and would rather go to Sydney and be hanged." Other witnesses give similar testimony.

Desperate attempts to escape have repeatedly been made. In 1827, the prisoners rose, murdered the guard, and made themselves masters of the island for a short time. In 1834, they very nearly succeeded, but were put down after nine were killed.

The law professes to inflict punishment only for three purposes—to repair the wrong, to amend the criminal, and for the sake of example. The horrible punishments in Norfolk Island fulfil none of these conditions. They make no reparation to the persons injured; none to the country, which, on the contrary, is subjected to a heavy expense by the maintenance of the penal colony. From the first shipment in 1786, to March 1837, a period of fifty years, 96,558 convicts were sent to one or other of these penal settlements, and the expense was at least eight millions sterling, or L.82 each. The punishments are utterly lost for the purpose of example; because what is transacted in a remote isle of the Pacific Ocean, without a newspaper, is never seen, and not even heard of, by one in a hundred of those upon whom the example ought to operate. They do not amend the criminal; but, on the contrary, harden, deprave, and brutify him. On this point all the witnesses are agreed. A well-disposed prisoner is insulted, despised, and ridiculed, till he is forced, in self-defence, to adopt the vices of his companions. One of them, when receiving sentence, said,—“Let a man be what he will, when he comes here he is soon as bad as the rest; a man’s heart is taken from him, and there is given to him the heart of a beast.” The remark drew tears from the eyes of Judge Burton, to whom it was addressed. These dreadful punishments, then, answer none of the ends which the law contemplates. They are merely so much torture inflicted without use or object, as if pain and suffering were in themselves a good. We believe they owe their continued existence to a principle which law ostensibly repudiates, but which still influences the minds of law-makers

—namely, that society is entitled to *revenge* the wrongs it suffers on the heads of those who commit them, though no benefit should result from the infliction, either to itself or to the guilty party.

Enlightened penal legislation rests on a single great principle, which is slowly but surely gaining ground—that *criminals should be treated as "moral patients."* By this it is meant, that they should be placed under restraint, and subjected to a system of discipline calculated to subdue their evil propensities, to call forth and exercise those good dispositions of which even the most wicked are not destitute, and to form such habits as may render them useful to society, and able to support themselves honestly when restored to liberty. The restraint should be continued till the "patient" is cured, and he who is found to be incurable treated like a confirmed madman—separated for ever from the society to which his vices would render him a scourge. The restraint and the discipline necessary to effect these objects will be sufficiently severe, and more efficacious in the way of example, than bloody, degrading, and cruel punishments, which harden and demoralize those who witness as well as those who endure them.

Captain Maconochie proposed a system of criminal treatment founded on these principles; and the experiment he is now making had the sanction of Government. The Committee had doubts as to one part of his plan, that of dividing the prisoners into small parties, responsible for each other's conduct, which we are inclined to think would operate beneficially.* It must be kept in mind, that the individuals were to

* The plan here referred to is more fully explained in the *South Australian Record* of 24th October 1840, from which the following particulars are derived. In Captain Maconochie's opinion, punishment and reform should be contemplated and pursued as separate objects. He proposes that the men, after being *punished* for the past, should come out on *probation* or training for the future, in parties of six, who should choose each other, and rise or fall together while undergoing the process. The objects contemplated in this arrangement are all of a social character. Even while the men are undergoing their direct punishment, it will give a value to the social virtues; because if a man does not recommend himself to his companions during this interval by good conduct, at least towards them, and by a reasonable promise of behaving well afterwards while on probation, he may not find five others willing to run their several chances with him. It will also prevent favour or prejudice on the part of an overseer from influencing a man's fate; because, when his period for punishment is expired, nothing short of a judicial extension will keep him in it, if other five men are willing to join with him; and, on the contrary, nothing but a very special and strongly-called-for exercise of supreme authority should release him without this being the case. It will thus sift the prisoners from the beginning; leaving the absolutely incorrigible behind, on the unexceptionable verdict of their own companions, interested in justly appreciating their character; and, at the same time, subduing the obstinacy of many who, in hitherto existing circumstances, have

select their own associates in these parties. The following extract from the Committee's report will explain the other parts of the plan :—

“ The great object of a good system for the government of convicts should be that of teaching them to look forward to the future and remote effects of their own conduct, and to be guided in their actions by their reason, instead of merely by their animal instincts and desires. With this view it is suggested that the performance of penal labour by convicts should be stimulated, not by the fear of the lash in case of idleness, or by any pecuniary allowance which may be expended in the purchase of tobacco or other luxuries, but by opening an account with each man, giving him credit for every day's labour, to be estimated by a greater or smaller number of marks, according as he had been more or less industrious, with an assurance that as soon as he should have earned a certain number of marks, he should be recommended for the remission of the remainder of his sentence. As marks would be obtained by industry and obedience, so they should be forfeited by idleness, insubordination, or any infringement of established rules.

been considered hardened, and giving an early tangible value to good conduct, and to the suppression, concealment, and mastery of evil dispositions and intentions, hitherto, on the contrary, too often rather a subject of private boast. The new system will, moreover, give them interests and feelings in common ; and, each having a direct concern in the good conduct of his fellows, the Government will have the assistance of all in the maintenance of discipline. The next suggestion is, that the direct punishment for the past should be limited in time, but that the *probation* should terminate only on the literal fulfilment of all its conditions. Only sustained good conduct will thus release a criminal from the restrictions imposed on him. Endurance will not serve him, or screen him from detection ; nor any thing short of positive merit, exemplified both in his own good conduct and in his success in bringing others through with him. The law will thus be exhibited in every case triumphant, and a true desire to pursue good will be infused into all, and a right *esprit de corps* be generated ; and an absolute necessity for certain virtues being created, society will, as in every similar case, certainly produce them. Lastly, it is suggested that both the processes of punishment and training should be undertaken systematically by the Government itself, not confined to the chance hands of settler-masters ; and that when the men have gone through them, and at length come into the general population, it should be on tickets of leave, with reasonable security for their observance. Captain Maconochie earnestly expresses his conviction “ that a separate, or any other unnatural state to which a criminal may be sentenced, cannot operate so advantageously on him as a well-contrived social or other natural state ; and that the latter has the further advantage, of operating on multitudes with the aid of multitudes, whereas the other operates merely on individuals, without assistance of any kind, and in opposition to all the natural impulses.”—How far the soundness of these suggestions has been confirmed by experience, is testified by the letter from Norfolk Island contained in the present article, and by other details published in the Number of the *South Australian Record* above referred to, and in the *Scotsman* of 21st Nov. 1840, and *Chambers's Edinburgh Journal*, 29th May 1841.—ED. P. J.

Instead of the summary infliction of the lash, or the loss of indulgences in food or otherwise, convicts should incur by offences of this description the forfeiture of a number of marks, proportioned to the gravity of the case, according to a scale to be framed for the purpose; nor should corporal punishment be resorted to, except for the purpose of repressing open resistance to authority. The whole number of marks each convict should be required to earn in order to obtain his pardon, should be so fixed, with reference to the number to be allowed for a good day's labour, as to enable him, by industry and good conduct, to obtain his pardon at the expiration of about half the period for which he had been sentenced.

"By adopting the plan which has just been described, that which has hitherto been uncertain and arbitrary will be rendered systematic and definite, and a powerful means of influencing the mind of the convict will be brought to bear upon his daily conduct. The adoption of this mode of governing convicts seems, therefore, to be well calculated to promote their moral improvement, and it is also likely to diminish considerably the burden of their maintenance, by rendering their labour far more productive than it has hitherto been."

"Twelve months have now passed, and still all is uncertainty as to the permanency of the present arrangements; and the experiment has thus been made as difficult as it was possible to make it. Twelve thousand of the old hands are here, and yet nothing can go on better. Before Captain M.'s arrival, they were sent here to be *punished* as it suited the mercy or the cruelty of the commandant! You can imagine nothing half so bad. The men were made desperate; they *murdered to be hanged*; killed each other from *charity*, and lived only in the excitement of violence and despair. This may seem exaggeration; but hundreds here can tell the tale, and the public records confirm it. Men were drawn up on the burning sand, with heads exposed to the sun, and there made to stand in different positions, without moving hand or foot; if they moved so much as to drive a fly away, twenty-five and fifty lashes were given on the spot. The men's minds were so excited, that bodily suffering had no effect on them. They were flogged until *pieces of flesh* flew off at every lash; after which, without care or covering, they were left to starve on bread and water in stone cells, while their poor lacerated bodies were left to time and nature to heal. Such like sickening details are too disgusting to dwell upon. There are hundreds here gradually sinking into an untimely grave, victims of these barbarities. On his arrival, Captain M. resolved at

once to lay aside the chains and the lash, and to try the influence of a more humane and rational system, founded on the principle of cheering and encouraging to good, rather than of terrifying from evil. With this view, his first object was to make the convicts understand that their future treatment would depend on their own conduct ; and that his aim was to encourage and reward honesty, regularity, industry, and intelligence—first, by kind general treatment and confidence ; and, secondly, by giving them *marks* for superior industry and good conduct ; which marks should both have a money value, and also go towards obtaining present comforts and ultimate freedom for their possessors.

“Against this system all the old authorities protested to a man ; but, nothing daunted, Captain M. fought step by step for his own views, and, in the face of every difficulty, persevered in his attempt. The results fully warranted his confidence in his own plan ; for never did such a change take place among such a set of men in so short a time. The convicts are now no longer in daily dread for their lives. I am told the sensation caused among them on Captain Maconochie’s first address was touching to the last degree. They met with hardened indifference. He began ; their attention was arrested ; he went on ; their features began to work ; they struggled hard, but nature prevailed. The flood-gates were opened by the first touch of human sympathy, and tears streamed down faces whose eyes for years had not been moistened. Humanity stood confessed : they were not all *brutes* ; and though the children of impulse, on whom much could not be reckoned at first, yet with time and patience much might be done. There are many *very bad* ; but the body have got the name which only the comparative few deserve. You would be astonished at the number of fine heads among them. There are numbers of that powerful class which one is apt to describe as great for good or evil, according to circumstances. These have hitherto been against them ; but the fine traits already shewn by so many, and the almost romantic anecdotes of attachment and disinterestedness which I could relate, make Captain M.’s task a most interesting one.

“Numbers are sent down here for endeavouring to escape from the colonies, and thus, with no additional *moral* offence, are subjected to the treatment here ; and these are generally the best men. Justice is so loosely administered, that since we have been here five men have been sent for, whose innocence was proved by accident, and who had friends to interest themselves about them. And we have reason to believe there are many more, while the real villains are at large. And I

believe you at home can form no idea of the mere trifles for which men have been doomed to the fearful horrors of transportation. Judges have been too anxious to clear the country at the expense of justice. The daily improvement of these men is sufficient reward for all Captain M. has suffered. They have formed a society among themselves for putting down bad language. All is order and regularity, the men going cheerfully to their work, and grudging no labour, however hard, if it is *the Captain's wish*—THAT is their law; it is like witchcraft the power he has gained over them—at least so it would appear to those who give these men no credit for human feelings at all. But his power arises from far higher sources. He has convinced them with the power of truth, that his sole object is their ultimate good; and to this all his regulations tend. He listens to all their grievances—endeavours to enlist their better feelings for the putting down vice in all shapes. Many cases he tries in the Barrack-yard among themselves. At first there was an endeavour to conceal crime—now, all are eager to discover it; and the change is such that few would believe it without seeing it. Those men who in the old times had been considered incorrigible, are now among the best men. We go among them and shew them every confidence.

“Soon after arriving, Captain M. and myself walked down to a quarry—there were three men working in chains. They looked as if they wished to speak to us. We went forward. They entreated Captain M. to relieve them of their chains, which he said he would do, *provided they would answer for each other*. One of them—Docherty—a fine young man of eight-and-twenty, hesitated, saying he had a very passionate temper, and when the overseers were saucy and overbearing he could not answer for himself knocking them down, and he would bear any punishment himself, but could not think of bringing his companions into any risk. Captain M. pointed out to him this would be a strong motive for commanding his temper. ‘Oh, Sir, when my blood gets up it is just *impossible*, and it is *such a comfort to get it out*.’ There was a struggle of generosity among them; at last he was prevailed upon to try. This man had originally been in the Guards, sent out to Sydney for some insubordination towards his sergeant, and sent here for endeavouring to escape; a man, Burns, had been with him in all his troubles here, and their attachment was quite extraordinary. These men had each, in eighteen months, 2200 lashes, twelve months in prison, on bread and water alternate months, and chained in a damp cell. Poor Docherty, after five months’ steady good behaviour, attempted to hang himself; he was fortunately cut down and recovered, but,

though very weak, would not stay in the hospital, for fear they should say he was malingering. He continued very weak; he should work though not very able for it. The medical man told me his digestive organs were quite deranged, and it would require care and time to recover him. I sent for him, and told him that we wished to get his health re-instated, and that I would have him to work in my garden, to do as much or as little as he liked, and that the food proper for him should be sent from the house to him. He appeared most grateful, but moped for want of Burns, and he used to carry some of his good things to his friend. We brought Burns to work with him. We often talked to him, while the tears would rush to his eyes, and he became gentle even to timidity. But he gradually sunk into low spirits, and one morning flew to the guards, begging they would kill him. For some days he continued very vehement; the paroxysm subsided, and he returned to his garden, with Burns to take charge of him. But he gradually got worse, and at last was forced to be confined, first in the hospital and then in the prison, Burns tending on him night and day. Captain M. went often to see him; and one day, when sensible, he said:—'Oh! sir, when I used to be in trouble, and did not care what I did, I was quite well; but now that I see my bad ways, and wish to turn to my Maker, and you are all kind to me, I can't bear my own thoughts, and this heavy trouble comes over me.' His fear and anxiety was, that he should do any harm in the attacks; urging upon Burns to kill him rather than run any risk. These men were considered *wild beasts*, and, on our arrival, we heard one officer boast of his courage in having gone *near where they were standing!* Kindness had come too late, yet it did what no harshness could have done. Poor Docherty literally sunk under the weight of it. One time, on Docherty's recovering a little, he wanted to walk in the bush; the authorities would not hear of it, saying he wanted to be after mischief. Burns came to Captain M. and offered to be *chained to the leg with him*, to satisfy those who were afraid; but this Captain M. would not allow, and, as he had no fear, ordered them to be permitted. There are few friends would have asked for such a thing, merely to gratify the craving of an insane man. The insanity became confirmed, and he is now gone to the Sydney asylum. Burns is now free. I could write pages, but must satisfy myself with one more instance which has just happened.

"A man, named Stacey, has hitherto borne, and deservedly so, the very worst character on the island. His public character is fearful, and his companions are all afraid of him. He has a head like a giant's. It seems last week he had been

gambling, and lost two shirts which did not belong to him, and, feeling ashamed to face his companions, made off for the bush. He was two days missing, and no robbery having been committed, it was generally believed some accident had happened to him. On the second morning, after heavy rain all night, he was found sitting quite exhausted, and not able to move without help. They asked him how this was? He answered, that, under any other commandant, he would have committed half-a-dozen robberies; but he had done enough ill in return for Captain Maconochie's kindness to him; and that he would rather starve than vex him. He was then asked why he had not gone to Grey? (a friend of his, whom Captain M. sent out of his way to one of the sheep-stations). 'No,' he said, 'he had not gone, *for fear of getting Grey into trouble.*' Thus did this reckless man shew, in the midst of the strongest temptation, a self-denial which few of us, I fear, could have exhibited. Surrounded as he was by poultry-yards, pig-yards, and sheep-stations, yet he must have died had he not been found when he was. Who will dare to say such men cannot be recovered? But we have much need of good religious catechists among us, who will come with a missionary spirit, to devote their thoughts and time to the great work.

"The chief of our servants are from among the old hands—and most devoted ones they are. But S., with her brother and his wife, who came out with us, enter warmly into all our views for their good, with a kindness and intelligence that might shame their betters. J. S. is one of our free overseers, and is much respected.

"Twelve months have now passed, and we are still uncertain what is to be done; but it seems probable that all future arrangements will depend on the result of the present experiment. Among the new prisoners there is really neither trouble nor anxiety. With most inefficient apparatus, Captain M. has proved his judgment to be correct. Six hundred of these men have now, for twelve months, lived two miles from the settlement, in *wooden barracks*, not a soldier near them, and with only two free overseers; there has not been the slightest attempt at insubordination. Let Sir W. Molesworth come himself and see and be convinced. No one would believe that all this is produced without some peculiar management. It requires temper, judgment, patience, and a right estimate of human nature. Any ignorant soldier placed as commandant, as he happens to be the highest in rank, would again soon have this peaceful orderly community worse, perhaps, than they ever have been—and that would be scarcely possible.

"I should mention that the men are paid in 'marks' for their labour; so many count towards their freedom, and all extra have a certain money-value, for which they get their food and clothing, as they like best themselves. If they don't work they get no marks, consequently no food but bread and water. There are no idlers; many will work all night for extra marks. They have got an evening school, where 180 have learned to read; each man subscribing so many marks a-month, which pay their teachers—the better educated among themselves. Captain M. encourages every good thing they propose, but likes it first to emanate from among them. They comparatively feel themselves to be free men, acting for their own and each other's good. They have formed a Friendly Society, for the benefit of the sick or accidents, for, as in real life, no wages are given during confinement—and from mark-subscriptions yearly, a few are allowed from the fund weekly to the sick. Young men, and boys from eleven to twenty (we have some younger), come forward begging to be taught trades. Many a fine lad here, and men too, who have families at home, have expressed gratitude that they have been sent here. Music is encouraged among them, and you would be astonished at our band. Dr Reid, the medical man for the new hands, has been brought up in Germany, and is a thorough musician, literally able to play on every instrument. He has taught, with other assistance, thirteen who, six months ago, did not know a note. They now astonish all who hear them. I have heard no such band in the Colonies. There are flutes, clarionets, French-horns, bassoons, trombones, &c. &c., and they are now manufacturing a drum. They play every Thursday in the Settlement. They are capital glee-singers—and our church-music is quite beautiful. The men in their leisure hours meet for improvement; and so eager are numbers of them, that they beg for task-work at so many marks, getting up at four in the morning, and having it done by ten or eleven—so that the rest of the day is their own, to read or sing, play, or work at some ingenious fancy of their own. We have a few books for them; but, like all other instruction, it is yet limited, from Sir George's natural unwillingness to enter into expense during our uncertainty. Pages of letters, syllables, and easy lessons, have been printed from some types, given as play-things to one of my boys. We had no other means of teaching them to read. It is the want of means for carrying out Captain M.'s views which vexes and annoys him; also the long-continued uncertainty of the value of the men's marks for their freedom. For though he was sent here with full authority to do what he chose, yet none of his acts have yet been confirmed, and

thus the men are still in a state of suspense. He is very desirous that the second convictions from these Colonies should also be placed under his authority. It is strange that the Sydney Government should have power to punish these men as they choose, when the Home Government pays for the establishment. It is now eleven months since any more prisoners have arrived. This we think is ominous of some change. In the mean time we are all very glad at having seen Norfolk Island; we shall never see its like again. Our house and garden are most beautiful; yet we are ready to live in a bush-hut to-morrow in King's Island to promote 'the great object.' I never saw Captain M. look better; he is in perfect health and spirits. His *intentions* are appreciated; he is eager, however, for strangers to come and judge for themselves. For his success here can only emanate from himself, and will in many quarters be looked upon with suspicion."

IV. *Observations on the Effects of different Medicines, and different Kinds of Food, &c. on the Mental Faculties.* Read before the Phrenological Association, at London, on 8th June 1841, by C. OTTO, M.D., Professor of Forensic Medicine in the University of Copenhagen.

Manifold as are the uses of Phrenology, firmly as we believe in its importance in so many and various concerns of life, the deeper must be our regret that it is not yet so generally adopted and employed, as is desirable for the general and individual welfare of mankind. In regretting this with respect to all our fellow-creatures, I do so still more in reference to *medical men*; for, independently of the use which everybody can draw from Phrenology, the station and calling of medical men enable them, by the light and aid of this science of mind, to be, in an especial manner, useful to their fellow-men. They may learn from it how to treat insanity, and particularly monomania, in the most rational and most successful manner; and be enabled to vote justly on the responsibility of criminals. But besides this, they would be led to pay attention to facts and events in their calling—in medicine—that might be of great value as to health in general, and in the treatment of particular diseases, and which hitherto have escaped attention entirely. I shall here mention only one point—in my opinion a very important one—which, ever since I became a phrenologist, has attracted my attention. It concerns the *action*

of different medicines on the mind. I am convinced, from facts in my own practice and in that of others, that different medicines, independently of their general action, and their action on other particular organs of *the rest of the body*, have likewise a *particular action on a particular faculty, or particular class of faculties, of the mind*. It will certainly be long before we arrive at incontrovertible and pure conclusions as to this point; for as, in a general point of view, the effects of medicines yet require much study and research, so, specially, their effects on the particular faculties of the mind must be inquired into and observed by many before we can draw any certain conclusions. During upwards of ten years I have collected many materials relating to this point, and have noted down the observations of others, made without any idea of their importance; and I think myself entitled to assert, that *every medicine acts differently on the brain—acts on one particular faculty, or one particular group of faculties, of the mind*. But not having my collection of materials at hand, and being but an individual who may err, I can here give you only some hints, satisfied with having drawn your attention to the subject, and leaving it to others to correct my notions. I confess beforehand that I am sure you will not applaud *all* my propositions. I frankly admit that much of what you are to hear is only hypothesis, perhaps fancy; but I still hope you will think me right in the *principle*.

The arguments supporting my assertion are partly *a priori*, partly *a posteriori*.

As to the arguments of the former class, I may observe, that all the different states of our *body* act in a different manner on the brain, and that every peculiar state has a particular effect upon a particular faculty, or on a certain group of faculties, of the mind. It seems to me, that every external agent or stimulus in the world acts differently on the brain, one agent more on one, another agent more on another faculty; and I think that a wise Providence has ordered it so, that just *those* faculties are acted upon which are required to act on this or on that particular occasion in order to provide for our welfare, in order to answer this or that purpose. Will any body deny the influence of different states of the body on particular faculties of the mind, who has observed in himself and others how different his mind is—how certain faculties are active and others passive—in different seasons of the year, at different times of the day? I dare not here go into details, but merely refer to everybody's own experience, whether he is not another mental being in winter and in summer, in the morning and

at night, in fine and in foul weather? * The difference certainly depends upon mere circumstances, such, for example, as the action of different food; but time, having a marked effect on the mind, is likewise, I think, influential as such. To come to particulars—Are not the *intellectual* faculties active in the morning; and are not the social feelings then more dormant, as likewise particularly the animal propensities? Does not this intellectual activity continue during the day? and ought it not to be so, as at that period we are called to exert ourselves in our different callings and businesses? But towards evening, and particularly in the night itself, the *animal* faculties begin to awake, and at last attain their zenith of excitement. It is *at* and *in* the night that riots and quarrels particularly take place; it is *at* and *in* the night that most crimes and misdeeds are committed. As to the feelings, we

* Many readers will answer these questions in the affirmative; but others, who have less susceptible nervous systems, will reply that they are unconscious of any difference in their mental condition. Milton composed the *Paradise Lost* during only six months in the year, and, in answer to a question of his nephew Phillips, said that "his vein never happily flowed but from the autumnal equinox to the vernal; and that whatever he attempted at other times was never to his satisfaction, though he courted his fancy never so much." Dr Johnson, in his *Life of Milton*, treats the idea with ridicule: "This dependence," says he, "of the soul upon the seasons, those temporary and periodical ebbs and flows of intellect, may, I suppose, justly be derided as the fumes of a vain imagination. *Sapiens dominabitur astris*. The author that thinks himself weather-bound will find, with a little help from hellebore, that he is only idle or exhausted. But while this notion has possession of the head, it produces the inability which it supposes. Our powers owe much of their energy to our hopes; *possunt quia posse videntur*. When success seems attainable, diligence is enforced; but when it is admitted that the faculties are suppressed by a cross wind, or a cloudy sky, the day is given up without resistance; for who can contend with the course of nature?" Johnson has devoted the 11th No. of the *Idler* to the enforcement of the same view. "Surely," he there says, "nothing is more reproachful to a being endowed with reason than to resign its powers to the influence of the air, and live in dependence on the weather and the wind for the only blessings which nature has put into our power, tranquillity and benevolence. To look up to the sky for the nutriment of our bodies, is the condition of nature; to call upon the sun for peace and gaiety, to deprecate the clouds lest sorrow should overwhelm us, is the cowardice of idleness, and idolatry of folly. . . . He that shall resolutely excite his faculties, or exert his virtues, will soon make himself superior to the seasons; and may set at defiance the morning mist and the evening damp, the blasts of the east, and the clouds of the south." That there is much truth in this concluding remark is unquestionable; but Johnson assuredly carries his notion too far. His own temperament had too much of the lymphatic in it to confer on him the quick sensibility which characterizes many: its sluggishness is illustrated by the fact of his ever requiring the strong stimulus of necessity before he could apply laboriously to composition. "No man," said he to Boswell, "loves labour for itself." On the subject now under discussion, Boswell, with a livelier temperament, had juster views than those of his Idol. "Alas!" he exclaims, "it is too certain that where the frame has delicate fibres, and there is a fine sensibility, such influences of the air are irresistible." It is

perceive Ideality and Hope active in the morning, Wonder and Cautiousness in the night. This ought to be so ; for must not Cautiousness be in the night particularly on its guard in order to stimulate us to finding means for protecting ourselves and our families in the dark, and against the active animal propensities of others abroad ?

Now, as this state of our body at different times is modified by different causes, so likewise the activity of the faculties of the mind is modified accordingly. I will only further advert to that modified state of the body which is called *disease*. I think it evident that certain particular diseases have a particular action on particular faculties of the mind ; that perhaps every single disease stands in a particular relation to one particular faculty, or at least one particular class of faculties. Thus, all the *acute* diseases put Cautiousness into the greatest activity ; we feel low-spirited and anxious immediately at their commencement : and well it is that such is the case ; for in this way are we immediately led to provide against the threatening enemy by calling in a physician, and being cautious as to food, drink, &c. *Chronic* diseases have a different action according to the bodily organ that is affected ; they act now upon this, now upon that class of the mental faculties. When, for instance, the liver or spleen is affected, we see all things

proper to add, that, in a conversation subsequently recorded in Boswell's work, Dr Johnson speaks less confidently than in his published writings, of such cases as that of Milton. "I never," said he, "felt any difference upon myself from eating one thing rather than another, nor from one kind of weather rather than another. *There are people, I believe, who feel a difference ; but I am not one of them.*"

Dr Henry More, in his *Discourse of Enthusiasm*, sect. vii., says—"Our imagination alters as our blood and spirits are altered, and indeed very small things will alter them even when we are awake ; the mere change of weather and various tempers of the air, a little reek or suffumigation," &c. And Sir William Temple, in his *Essay on Poetry*, observes—"Our country must be confessed to be what a great physician called it, 'a region of spleen ;' which may arise a good deal from the great uncertainty and many sudden changes of our weather in all seasons of the year. And how much these affect the heads and hearts, especially of the finest temper[ament]s, is hard to be believed by men whose thoughts are not turned to such speculations. This makes us unequal in our humours, inconstant in our passions, uncertain in our ends, and even in our desires."

The effects of the weather on the temper have already been noticed in this *Journal*, vol. ix. p. 420 ; and vol. xiii. pp. 391, 392.

Cowper tells in his *Letters*, that he habitually "rose cheerless and distressed in the morning, and brightened a little as the day went on." "Sleep," says he, "that refreshes my body, seems to cripple me in every other respect. As the evening approaches, I grow more alert, and when I am retiring to bed am more fit for mental occupation than at any other time. So it fares with us whom they call nervous." (*Works, Grimshave's edit.* ii. 228 ; v. 98.)

Regular and imperative occupation we believe to be the best remedy for such inequalities of spirits and intellectual power.—EDITOR.

and events in a gloomy aspect ; that is, Cautiousness and Conscientiousness are morbidly acted upon :—when the heart or lungs, on the contrary, suffer, Hope is ever active, and along with it Ideality and all the intellectual faculties. *Blind* persons are friendly and kind, *deaf* ones bad-tempered and saucy. *Tabes dorsalis* is always accompanied by the greatest melancholy. I should almost think, that, were we to pay attention to the subject, we should observe that every particular disease has a particular effect on the mind—that now this now that cerebral organ is acted upon.

If, then, it be conceded, that every modification of our natural state of body reacts on different mental faculties, I have only to ask, Are not the effects produced by medicines likewise a modified state ? and as every remedy produces particular effects, is it not a natural conclusion, *a priori*, that different medicines must act in a different way on the faculties of the mind ?

But likewise *a posteriori*, by actual experience, can this be proved. Every physician is taught this by facts occurring in his practice ; and if we have not many records upon this point, the deficiency arises simply from ignorance of phrenology on the part of most physicians, and from want of attention to the subject. I beg leave to make a few observations in support of the principle, that, whether the effect of different medicines on the mental faculties is mediate or immediate, certain it is, that in its character it is extremely different.

The effect of different medicines on the brain may be *general*—depending on the circumstance whether the action of the remedies causes an increased or a diminished flow of the blood to and in the brain ; but it is undoubtedly likewise *local* on particular faculties or classes of them. *Aperient medicines*, for instance, produce both kinds of effects : in deriving the blood from the brain they *diminish* the activity of the mental faculties ; but, according to circumstances, if the brain has been overfilled with blood, and thereby prevented from acting, the relief so produced by the aperients must again awake its activity *in general*, and the *local* effects are then usually excitement of Hope, Veneration, Benevolence, and Ideality. We enjoy ourselves ; we see every thing and event in a brighter light ; we feel grateful to God, and kind to our fellow-men. Petition influential men about any thing in the morning, and you will observe the different result of your request—the different manner in which it is received—according to their bowels having been opened or not ! All those medicines which *increase the circulation* of the blood, augment more or less the quantity flowing through the brain ; and in this manner, if the

excitement does not exceed the natural limits, *all* the organs of the brain are excited. But the *local* effect is very different, partly according to the predominance of certain single faculties, but partly likewise because the different remedies of that class have a different specific action on certain particular faculties. For instance, ammonia and its preparations, morphia, castoreum, wine, ether, and the ethereal oils, produce a greater activity of Ideality, Hope, and the reflective intellectual faculties; but the empyreumatic oils occasion a greater activity of Cautiousness, Wonder, and the perceptive faculties—for they induce melancholy feelings, and mostly visions, particularly of the gloomy kind. Phosphorus has a particular action on Amativeness; it produces an increase of physical love, and is in consequence found of use against impotence. Iodine, likewise, acts on Amativeness and Cautiousness. All the odoriferous gum-resins, balsams, and aromatics, act on the same propensity, and on Ideality; and hence their good effects in hysterical affections, which are mostly combined with morbid Amativeness and Ideality. Cantharides, likewise, act on Amativeness. Camphor has a contrary effect; it depresses Amativeness, as all physicians know. Bitter and astringent remedies act more on Cautiousness; bark, long used, produces gloominess of mind. The farinaceous and mucilaginous are commonly called *the indifferent remedies*; and so they really are. Their *local* action is lubricating, emollient, &c.; their *general* is nourishing: but as their whole action is *bland*, so also is their nourishing one; that is, they deposit their nutritious matter without any excitement. Hence they must be considered as no excitants of the brain either; they excite no mental faculties at all. Of the *metals*, arsenic acts more on Cautiousness, producing a gloomy state of mind; gold on Hope, having been used by the ancients as an exhilarant; mercury, a morbid sensibility, gloominess, and indisposition to occupations usually agreeable. Of the different gases, I will here advert only to the nitrous, which acts so differently from the others, producing mirthfulness, love of life, bright prospects (excited Wit, Ideality, and Love of Life). But it is most interesting to observe the different local action of *narcotics* on the faculties of the mind. Independently of the excitement of the *whole* brain on account of the increased flow of the blood to that part, a particular *local* excitement is observed after each different narcotic. Thus, *opium* acts on Amativeness, and likewise on the intellectual faculties and Ideality. That it acts particularly on Amativeness, is proved by the fact, that those who use this drug immoderately, or in large doses, feel a great desire for gratification of the faculty, and even now and then get a true

priapism. That it acts on the intellectual faculties and Ideality, is evident from the activity of the intellect after a moderate dose, from the brilliancy of ideas that occur (See "The Confessions of an English Opium-eater"), and from the continuation of the activity of the same faculties even after sleep has been produced by it. Every body who observes such a patient, will perceive how objects continue to represent themselves to his mind, and how, as Dr William Gregory says, "the mind is awake, while the body sleeps." Of the intellectual faculties, that of Language in particular seems to be active; hence the loquacity of the sleeper. This excited state of the organ of Language is, according to Dr Gregory, particularly produced by a certain preparation of opium, the *muriate of morphia*. Dr Gregory says—"I have always observed an increased flow of ideas, a greater power of following out a train of reasoning, after taking the muriate of morphia; and I have never experienced from it any excitement of the lower propensities." "For some hours after a dose of this medicine, the organ of Language is so strongly stimulated, that I find it difficult to stop when I begin to speak; and I have repeated this experiment, which is attended with no inconvenience, so often, that I am quite confident of the result." (Phren. Journ. vol. viii. p. 163.) Having on other occasions taken a considerable quantity of the medicine, he found it to produce a marked derangement of the faculty of Language, amounting to a dissociation of words from the things signified, and, in the most severe instance, accompanied by violent headach in the situation of the organ. "An overdose may probably entirely derange the faculty." On account of the calm collectedness of mind which the muriate of morphia produces, and of the stimulus which it affords to the organ of Language, Dr Montgomery Robertson and Dr Gregory are disposed to recommend this medicine to nervous people who have to make an appearance in public. Now, if we compare the effects of opium with those of *belladonna*, *hyoscyamus*, or other narcotics, we shall find them quite different. None of them acts, like opium, on the intellectual faculties. On the contrary, *belladonna* stupifies them; so does likewise *cicuta*. *Hyoscyamus* seems to have a particular exciting action on Combativeness; for all patients who take it become saucy, and inclining to anger and violence (See *Diction. de. Med.* t. vi; art. *Jusquiame*). *Crocus* acts on Amativeness; *cannabis* on Mirthfulness and Hope—all observers combining in asserting, that the inebriated state which follows spirituous drinks, prepared with this drug, is characterized by immoderate mirth. *Tobacco* has quite a peculiar effect. It has, firstly, a marked influence on the organ of Language (as

opium has); and, secondly, on the intellectual faculties. This is already sufficiently proved by the practice of smokers of tobacco. In order to excite the intellectual faculties, in order to promote conversation, nothing is better than a pipe or a cigar! Even when you feel quite indisposed to reading or writing, you will immediately become inclined when you take to the pipe; and conversation never flags amongst smokers.

For proof of my assertion that all the different medicines have a different and particular action on particular mental faculties, I shall finally only remark, that the ancients speak of the power of many herbs in disturbing the balance of the mind, in brutalizing the passions, in producing physical love, in putting the mind in a brilliantly dreaming state, &c. &c.

And if it may be assumed that particular medicines act on particular parts of the brain, there can be no doubt that likewise *particular sorts of food and drink* act on particular mental faculties, or on particular classes of them, leaving some others quite unaffected.

As the state of the body, acting differently on the mind, is modified by our food and drinks, we must likewise already *a priori* be entitled to draw this inference (*vide supra*); but we can also do it *a posteriori*.

Every body's experience must have taught him, that he is not in the same state of mind after every sort of food and drink: now he is gay and merry, now gloomy and low-spirited; now he is talkative and witty, now silent and stupid; now he is inclined to anger and passion, now extremely tractable; he will now feel this group of faculties excited, now that; now the intellectual, now the lower ones.

Eggs are admitted by all to have a marked action on Amativeness; and why should eggs only, of all our food, enjoy the privilege of acting upon a particular part of the brain? I think every sort of food does it. All sorts of *meat*, for instance, act particularly on the lower propensities, which is abundantly proved by the ferocity, cruelty, and wild passions of all the carnivorous animals, and by the fierce and animal passions of those nations and individuals who feed almost exclusively on *meat*. But, at the same time, the intellectual faculties also are more acted upon; and hence the really greater intellect of the carnivorous animals. All *vegetable* food, on the contrary, leaves both the animal and the intellectual faculties at rest, and stimulates rather the moral feelings: this is evident from the benevolence, blandness, and mildness of all the herbivorous animals, and the peaceable and quiet temper of those nations and individuals who feed mostly upon vegetables: hence, however, likewise their weak intellect. But besides this *general* action

of all meats and all vegetables, I am inclined to think that each sort of meat, and each sort of vegetables, has a different action on particular mental faculties from other sorts: pork excites the animal propensities more than either veal or mutton; peas are famous for acting on Cautiousness and Wonder, &c. I allow that there are many circumstances which may influence our state of mind after a meal; but I am sure that a particular sort of food is one of the most essential ones.

This, I think, is still more evidently the case with different *beverages*. I will here mention only water, wine, spirits, beer, coffee, and tea.

Water is certainly the most natural and most wholesome beverage; and as it is healthy to the whole body, so of course is it also to the brain; and the same remarks I have made respecting farinaceous and mucilaginous medicines, which are mere aliments, hold good here as to water. No faculty of the mind is excited; which is, of course, the healthiest mental state.*

Independently of the mild excitement of the whole brain produced by wine, through an increased flow of the blood to the head—and independently of the fact that the excitement occurs particularly in those faculties whose development is large—I suppose that *wine* has a more special effect on the moral feelings and on those faculties which are on the boundaries of the feelings, and the intellectual faculties—on Benevolence, Veneration, Hope, Mirthfulness, Ideality. Of the lower propensities, it acts principally on Adhesiveness. We have a proof of the truth of these opinions in the mutual benevolent feelings that commonly arise in a company where wine is moderately taken; in the merry and bright ideas that are engendered; in the hope that springs up; in the wit which sparkles; in the willingness with which you shew and express your regard for greatness and worth; in the cordiality and warmth with which you speak to your fellows, and which you really at that moment have; in the many friendships and connexions that are formed at the wine-table; in the fact, that many old quarrels are there made up, and that many, whom misunderstanding and old disagreements have separated from each other, meeting over the wine-cups, again shake hands and renew their former tie. At the same time that these feelings and sentiments are excited, the intellectual faculties likewise, as

* "Water," says Dr Rush, "is the universal sedative of turbulent passions—it not only promotes a general equanimity of temper, but it composes anger. I have heard several well-attested cases, of a draught of cold water having suddenly composed this violent passion, after the usual remedies of reason had been applied to no purpose."—(*Inquiry into the Influence of Physical Causes upon the Moral Faculty*.)—EDITOR.

is proved by the easier flow of ideas, are stimulated, but in less degree. The organ of Language is among those particularly acted upon : you speak better, you have a better command of words, you become even eloquent, with the wine at your side. Except Adhesiveness, and perhaps also Amativeness, all the lower propensities are, on the contrary, put in the background. But the whole state of mind takes another turn when *too much* wine is taken ; then particularly one of the component parts of the wine—the alcohol—acts ; and then immediately the animal faculties begin to get active, and that faculty manifests itself particularly, the organ of which predominates in the lower and back part of the brain.

And here we see how the third beverage, *ardent spirits*, acts on the faculties of the mind. Spirits of wine have in that respect a widely different action from wine. Do not object to me, that wine and ardent spirits must have the same effect, since they contain the same active ingredient, the alcohol. This is not the case ; spirits contain pure alcohol, only mixed with some water ; wine contains many other elements besides—acids, salts, &c. I do assert, that ardent spirits have a specific effect on the lower propensities, the worse part of our character. This is already put beyond dispute by the fact, conceded by all, that they brutalize the mind ; in other words, excite the animal faculties. Look at the gin-houses ; look into all the public places where the lower classes indulge in ardent spirits. What disputing ! what broils ! what quarrels ! Can any body doubt the degrading effects of ardent spirits on the intellectual faculties and the moral feelings ? Has not the habitual drunkard lost all the ennobling qualities of man ? We may likewise deduce from this evident specific action of ardent spirits on the lower propensities, the importance of encouraging temperance societies,—the importance of diminishing, as much as possible, the use of spirits.

As to *beer* : it likewise contains alcohol, but mixed with other principles, particularly extractive ones, which modify its effects. It has no beneficial action in common with wine ; it has more in common with spirits. It does not excite the intellectual faculties ; and if it appears to do so when taken in a very small quantity, this is only on account of the small resemblance to wine. When taken in a greater degree, it depresses the intellectual faculties ; in particular, the organ of Language, instead of being excited, is on the contrary depressed. You will observe this in the southern German universities : the students, although else very talkative and communicative, are, when they sip their beer, sitting quite silent and gloomy-looking in spite of the Language-exciting *tobacco*

which they smoke. Beer, moreover, stimulates the animal propensities less than ardent spirits; and, of the feelings, I should think it particularly acts upon Cautiousness—for beer-drinkers are rather morose and low-spirited.*

Coffee and tea have, I am inclined to believe, a peculiar action on the intellectual faculties; coffee still more than tea. They are both on that account the favourite beverages of intellectual people and students. I appeal to everybody's experience, whether he does not feel more disposed to think, to write, to read, after a cup of coffee or tea; and whether either of them has any action whatever on the lower propensities. If a person feel indisposed to literary labour, a good cup of coffee will instantly make him disposed to it. Here in England tea is preferred to coffee in the morning, and the latter is taken only after dinner, when it cannot have the effect above mentioned, on account of digestion going on. Whoever will try the effects of coffee and tea in the morning as a means of exciting the intellectual faculties, will immediately give the palm to coffee. Add to this a cigar (which acts upon the organ of Language), and you have all the excitants for composing and writing well!

If what I have stated on the specific action of different medicines, and different kinds of food and drink, on particular mental faculties or groups of faculties, is true, it will certainly lead to very important results as soon as sufficient experience has been acquired. How important will it not be in the choice of remedies, food, and drink, in certain diseases, and with certain individuals, according to their mental state, and according to the prevalence of certain faculties, or a class of faculties, in their brain! How important will it not be in the treatment of mental diseases and madness, when this or that faculty particularly is affected! How important in certain countries, where some mental diseases are endemic, or a certain mental state prevails, as, for example, hypochondriasis in the western islands of Scotland! How important, when you intend something particularly—when, for instance, you are to write an essay or make a speech, or when you are going to a party, and wish to be agreeable and social! How important, even in education, when certain faculties predomi-

* "Fermented liquors of a good quality and taken in a moderate quantity, are favourable to the virtues of candour, benevolence, and generosity; but when they are taken in excess, or when they are of a bad quality, and drank even in a moderate quantity, they seldom fail of rousing every latent spark of vice into action. The last of these facts is so notorious, that when a man is observed to be ill-natured or quarrelsome in Portugal after drinking, it is common in that country to say that 'he has drunk bad wine.'" (Rush, *loc. cit.*).—EDITOR.

nate and others are slumbering, to be able likewise to excite the last, and depress the first, by these material means ! How important in penitentiaries, where the lower propensities are to be depressed, and the higher faculties excited, to be able to attain this even by medicines and certain foods and drinks ! &c. &c.

I conclude with repeating, that I myself consider several of my propositions only as conjectures, and that my only object was to turn your attention to the principle as an important one in its application. This will be my sole merit.

Note by the Editor.—We have inserted the preceding paper for the purpose of calling attention to a subject which we concur with Dr Otto in regarding as one of great importance. But in doing so, we think it right to express our opinion that it contains many statements and views which require to be greatly modified before being received, and all of which, indeed, the author himself does not undertake to maintain against an assailant. Writing in haste and at a distance from his records, as Dr Otto did, he has, for example, in various instances, omitted all reference to the influence of cerebral development, and other circumstances, in modifying the action of external agents upon particular faculties of the mind, and has left the reader to suppose that he ascribes the whole results to these agents alone—thus occasionally seeming even to set aside phrenology altogether. But these are inadvertencies which do not affect the *principle* of the essay, and which Dr Otto himself would have corrected had leisure permitted. We trust, therefore, that our readers, fixing their chief attention upon the principle for which Dr Otto contends, will not regard the almost unavoidable imperfections of the mere details with a very critical eye ; and that Dr Otto himself will, in due time, put us in possession of the more carefully digested observations with which his experience has furnished him. We may add, that the subject is one which did not escape the penetrating sagacity of Spurzheim, and is referred to in his *Treatise on Education*. In conversation, we frequently heard him express his opinion of the necessity of investigating more accurately and extensively the special influence of different kinds of food and drink upon the activity of the various mental faculties, and of the valuable results which might thus be obtained ; and we shall rejoice to see the subject effectually taken up by our able and excellent coadjutor at Copenhagen.

V. The late William Scott, Esq.

We announced in our last Number the death of this eminent Phrenologist, and promised to put subsequently upon our record, as due to him, an ampler sketch of his character than that brief notice could contain. Mr Scott, for some time one of the proprietors of this Journal, was one of the most distinguished of phrenologists; and, in connection with both the science and its literature, was well known to the phrenological world. An accidental meeting with Mr Combe, twenty years ago, converted Mr Scott from one of the unthinking, who were content to take their impressions of Phrenology from the *Edinburgh Review* and *Blackwood's Magazine*, and make merry with it, to a serious student of the new science; and we well remember the grasp which his powerful mind almost instantaneously took of the subject when fully and candidly directed to it; nor can we forget the delighted enthusiasm with which, as a hitherto baffled, at least unsatisfied, student of metaphysics, he gloried in finding a path for his feet, and a light to guide him in it, in the realities of the physiology of the brain. Regardless of the self-complacent contempt with which the then uninformed public, blindly led by a hostile and not better informed press, treated the subject and its adherents, he declared himself a phrenologist, joined in 1822 the Phrenological Society, and, with several other individuals who at the same time rallied round Mr Combe, then well nigh standing alone, contributed to give to the cause the most striking impulse which, perhaps, it has at any time or in any place received. Mr Scott was in considerable practice in the law, and was an able and judicious man of business. He was remarkable for tact, sagacity, and knowledge of the world; while his powers of conversation, fund of anecdote, happy power of illustration and allusion, and quiet enjoyment and production of the ludicrous, rendered his society as amusing as it was improving. For some years he devoted much, if not the whole, of the time which he could spare from the duties of his profession, to the study and the advancement of Phrenology; and, when this Journal was established, eighteen years ago, took a share in its proprietary, and contributed largely to its pages. His papers display a combination of scientific knowledge, poetic fancy, and fervid eloquence, with a very happy power of illustration, which would have attracted general notice in any journal less an object of public prejudice than our own was at that time.

In the grasp, as we have said, which his mind took of the subject of Phrenology, he could not fail to be struck with the

symmetry of the science as a whole, and the harmonious manner in which it afforded "*a systematic view of human nature.*" An eloquent treatise, bearing that title, which he published separately,* was the result. In this, with much effect, he dwelt upon the division of the faculties into groups, with organs clustered in the same locality, when of analogous character and sympathetic action. Mr Hewett Watson points out (vol. x. p. 504) an anatomical error which Mr Scott commits when speaking of the organs which meet in the middle line of the brain; this, however, does not affect the general reasoning of his treatise.

Mr Scott was the first to employ Phrenology as an instrument of literary criticism, and a test of the truth to nature of the characters in celebrated fictitious compositions. Shakspeare was his first and principal field; and some of the leading characters of the Shakspearean drama are dissected by the powerful instrument he wielded with microscopic power, and with great literary skill and eloquence. His reviews of some of Sir Walter Scott's novels are also of a high character, and try those wonderful "imaginings" by a standard much more philosophical, searching, and powerful, than the effusions of laudatory fine writing of the common reviews. Mr Scott's miscellaneous contributions to this Journal, such as his essay on the Female Character, on the Refinement of the faculty of Amativeness, and others, are all beautiful conceptions, and admirably executed. But Mr Scott's direct aid to Phrenology had a higher range yet. He entered, in a zealous spirit, the metaphysical field of the science, and threw much light upon the everyday uses and combinations of several of the faculties. In illustrating the modes of action and reciprocal influence of such of them as employed his pen, Mr Scott was peculiarly happy; but the value of his papers is somewhat diminished, by the tendency of his mind to speculation rather than to systematic observation of facts. Aware, himself, of this tendency, and of its origin in the predominance of the reflecting over the knowing organs, Mr Scott rarely felt confident of the accuracy of his data and inferences, till after having submitted them to the judgment of friends better trained than himself to the strict precision of scientific observation. Owing to this peculiarity of mind, he was better qualified to excel as a cultivator of literature, than in purely scientific researches; and his forte certainly lay in happy and beautiful illustrations, warmed by the glow of the affections, and elevated and refined by the inspirations of Ideality, Wonder, and Veneration.

* *Observations on Phrenology, as affording a Systematic View of Human Nature.* Edinburgh: Waugh and Innes, 1822. 8vo, pp. 67.

Of Mr Scott's last work, "The Harmony of Phrenology with Scripture, shewn in a Refutation of the Philosophical Errors contained in Mr Combe's 'Constitution of Man,'"—of the causes which led to its publication,—and of the secession of its author from any active share in the diffusion of Phrenology, and in the management of this Journal—although, in addition to the very brief notices in our tenth volume (pages 235, 372, and 374), we feel called upon to say something—yet that shall be little. When, in January 1827, Mr Combe submitted to the Phrenological Society a paper "On the Relations between the Physical and Mental Constitution of Man and External Objects," his views were strenuously opposed by Mr Scott, and several other members, not so much on the ground of their being philosophically false, as because they were conceived to affect, in some essential points, the doctrines of orthodox Christianity—a phrase used synonymously with the doctrines of the Scottish Confession of Faith. The debates ceased to be philosophical, and necessarily became theological; and on a resolution being carried, by a large majority, that theological objections to philosophical propositions were out of place in a philosophical society,* Mr Scott and his adherents thenceforward discontinued their attendance, though not their membership. A printed but unpublished controversy between Mr Scott and Mr Combe ensued; and finally, in 1828 and 1836 respectively, the "Constitution" and "Harmony" were laid before the public. From the first we lamented, what appeared to us to be, the partial zeal with which Mr Scott not only contested Mr Combe's views, but arrayed the prejudices and the religious feelings of the public against them; and we regretted that a mind, so capable of advancing the cause of true philosophy, should have been led, by a concurrence of external circumstances with excited feelings scarcely compatible with philosophical calmness, to exert its utmost energies to obstruct the diffusion and reception of truths of vital importance to mankind. Feeling assured, at the time of the appearance of Mr Scott's work, that our readers required no aid to enable them to judge of it correctly, we considered it unnecessary to enter seriously upon its refutation; and the experience of the five years which have since elapsed, has confirmed us in the conviction that the course we adopted was right. If it was so in his lifetime, we are bound, by every feeling of justice and generosity, to adhere to it, now that he is no more. We shall, then, only repeat our deep regret that Mr Scott's career of active usefulness, in a pursuit which delighted all the higher faculties of his fine and vigorous mind, should have been stopped short by the occurrence of differences,

* See vol. vii. of this Journal, p. 94.

which to us—free as we were from all personal feeling in the matter—have ever appeared, in their origin at least, the result of unhappy accident, rather than deliberate design; and which, therefore, when rightly considered, were calculated to create sympathy and regret rather than any feeling of hostility towards Mr Scott personally. So strongly do we feel this conviction, that we have always entertained the belief that Mr Scott himself would, under more favourable circumstances, have been among the foremost to embrace and defend the essential principles expounded in the “*Constitution of Man*.” It is true that his strong Adhesiveness and Veneration predisposed him to look upon established opinions and authorities with a degree of submission which, in him, as in many others, may be called constitutional, and to shrink instinctively from any views which he thought threatened their stability;—yet his reception of Phrenology itself, in spite of the hostility to it of the learned and the great, is a proof that, when he applied himself earnestly and candidly to the examination of an important question, he was quite capable of advancing against the current of his former opinions. It was only when old opinions, of greater strength than those of a metaphysical character, biassed his judgment, that he clung to the former with the tenacity of feeling, and repelled whatever seemed to him opposed to their dictates.

We shall only add, that among persons hostile to Phrenology, Mr Scott’s work was very generally spoken of as *a refutation of the science itself*, and a repudiation of his former belief in its truth. This, we need hardly say, was an entire mistake. He repeatedly and anxiously distinguishes his reserved convictions of the truth of Phrenology, from his condemnation of what he considers Mr Combe’s perverse applications of it to human affairs; nay, more, to the last, he was engaged in thinking and writing on the subject of Phrenology, with no abatement of his belief in its character as the true science of mind.

Besides the two separate works already mentioned, Mr Scott was the author of the following papers in the *Transactions of the Phrenological Society*, and the *Phrenological Journal*. With respect to the authorship of several of those here enumerated, we are unable to speak with perfect certainty, and a mark of interrogation is therefore affixed to their titles:—

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From Philoprogenitiveness to Individuality, . . .	7½
Do. to Comparison, . . .	8
Concentrativeness to Individuality, . . .	8
Do. to Comparison, . . .	7½
Ear to lowest part of Philoprogenitiveness, . . .	4½
Ear to Individuality, . . .	5½
Ear to Firmness, . . .	6½
Cautiousness to Cautiousness, . . .	6½
Ideality to Ideality, . . .	5½

Of the *cast*, the dimensions are these:—

	Inches.
Greatest circumference, . . .	24
From Occipital Spine to Individuality, over the top of the head, . . .	15½
Ear to Ear vertically over the top of the head, . . .	15
Philoprogenitiveness to Individuality, . . .	8½
Concentrativeness to Comparison, . . .	7½
Ear to Philoprogenitiveness, . . .	4½
... Individuality, . . .	5½
... Benevolence, . . .	6½
... Firmness, . . .	6½
Destructiveness to Destructiveness, . . .	6½
Secretiveness to Secretiveness, . . .	6½
Cautiousness to Cautiousness, . . .	6½
Ideality to Ideality, . . .	5½
Constructiveness to Constructiveness, . . .	5½
Mastoid process to Mastoid process, . . .	5½

We hoped to be enabled to publish some biographical particulars respecting Mr Scott, but have not been so fortunate as to obtain the requisite materials.

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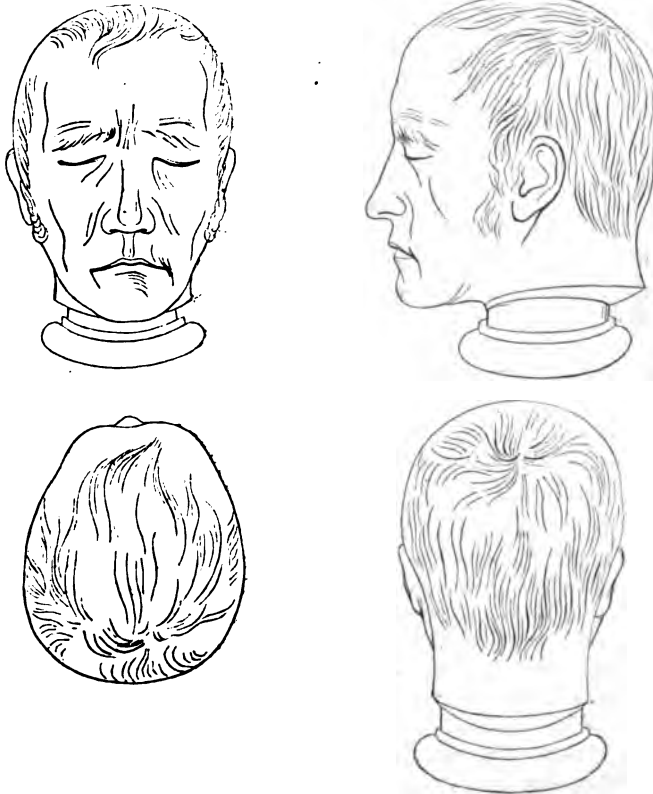
3. The Enemies of Phrenology.—*Journal*, i. 80.
4. Letter from Miss Cordelia Heartless.—*Journal*, i. 86.
5. Application of Phrenology to Criticism—Character of Macbeth.—*Journal*, i. 92.
6. Louis XI. and Charles the Bold, as delineated in Quentin Durward.—*Journal*, i. 176.
7. Burke, Fox, and Pitt.—*Journal*, i. 238.
8. On the Combinations in Phrenology; with specimens of the Combinations of Self-Esteem.—*Journal*, i. 378.
9. Ambrosian Manuscript.—*Journal*, i. 571.
10. Phrenology illustrated by quotations from the Poets (?)—*Journal*, i. 636.
11. Review of *The Inheritance*, a Novel.—*Journal*, ii. 55.
12. Music—Catalani, De Begnis, and Kalkbrenner.—*Journal*, ii. 120.
13. Letter to the Editor on Marriage (?)—*Journal*, ii. 178.
14. On the Female Character.—*Journal*, ii. 275.
15. On the Genius and Cerebral Development of Raffael.—*Journal*, ii. 327.
16. On the Influence of Amativeness on the Higher Sentiments and Intellect.—*Journal*, ii. 391.
17. On the Propensity of Philoprogenitiveness.—*Journal*, ii. 493.
18. On the Development and Character of the North American Indians (?)—*Journal*, ii. 533.
19. On Music, and the different Faculties which concur in producing it.—*Journal*, ii. 556.
20. Joseph Burke, the juvenile actor.—*Journal*, ii. 597.
21. Phrenological Analysis of the Character of Macbeth, concluded.—*Journal*, ii. 626.
22. On Adhesiveness.—*Journal*, iii. 76.
23. The Cerebral Development of R. B. Sheridan compared with his mental manifestations.—*Journal*, iii. 127.
24. A Phrenological Essay on Grief.—*Journal*, iii. 523.
25. Lord Kames and Phrenology (?)—*Journal*, iii. 536.
26. Speeches at a Dinner of the Phrenological Society.—*Journal*, iv. 133, 141, 150, 152.
27. Of Wit, and the Feeling of the Ludicrous.—*Journal*, iv. 195.
28. Audubon, Weiss, and Weber.—*Journal*, iv. 295.
29. On the Faculty of Comparison.—*Journal*, iv. 319.
30. Speech at a Dinner of the Phrenological Society.—*Journal*, v. 131.
31. On Individuality.—*Journal*, v. 226.
32. Case of—— Macdonald, the associate of Mary Mackinnon.—*Journal*, v. 435.

33. On Tragedy ; with some Remarks on the Character of Hamlet.—*Journal*, v. 516.

In vol. vi. p. 258, it is announced that, “ after the publication of No. XXI. of the Phrenological Journal, Mr William Scott ceased to be a proprietor of the work, and to have a share in conducting of it.”

During the years 1824 and 1825, Mr Scott acted as Secretary of the Phrenological Society ; and in 1826 and 1827 he filled the office of President. He subsequently continued to be a member of the Society, and was present at one of its extraordinary meetings a few months before his death.

On 3d February 1825, at the Society’s request, he presented to it a cast of his own head, of which four views are subjoined. When it was taken the hair was very short, except over the organs of Destructiveness and Secretiveness, where half an inch seems to have been added by it to the breadth of the cast.



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... Individuality, . . .	5½
... Benevolence, . . .	6½
... Firmness, . . .	6½
Destructiveness to Destructiveness, . . .	6½
Secretiveness to Secretiveness, . . .	6½
Cautiousness to Cautiousness, . . .	6½
Ideality to Ideality, . . .	5½
Constructiveness to Constructiveness, . . .	5½
Mastoid process to Mastoid process, . . .	5½

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Mr Barber delivered his third lecture on Phrenology at the Athenæum, Portsea, on Monday evening, to a larger audience than on either of the preceding evenings. Considerable curiosity had been excited in Portsea by the announcement that Mr Barber would give, in writing, his opinion of a skull which had been put into his hands by a gentleman at the last lecture, who had also promised to send to the chairman the character of the individual drawn by a gentleman who knew him when living. At the close of the lecture, Mr Orange rose and presented the skull, stating that Mr Barber had only seen it

in his presence, and could know nothing of the individual,—that Mr B. had only asked two questions respecting it; first, Whether the man had any disease of the brain? and second, Whether he had received any education? To both of these he had answered, No. Mr B. was then requested to read his remarks, which were as follows:—

“ In this skull the animal region greatly preponderates, and takes the lead in the character of the individual—Combative-ness, Destructiveness, Secretiveness, and Acquisitiveness, are the largest organs of the head. Next in size are Amativeness, Constructiveness, and Self-esteem; then Alimentiveness, Philoprogenitiveness, Inhabitiveness, Adhesiveness, and Firmness, all of which are large organs. Love of Approbation next in order of size; then follow Love of Life*, Veneration, Imitation, and Mirthfulness, which are moderate organs. Among the small organs, Causality is the largest; then follow the other intellectual faculties. The moral faculties are the smallest of all: by these I mean Benevolence, Conscientiousness, Hope, Marvellousness, and Ideality. I know nothing of the man, independently of the shape of the skull, but that he lived to be old, and that he was uneducated. I will not venture to indicate actions; but I hesitate not to say that he was capable of crime of almost any kind which might be prompted by situation or circumstances. His intellect was undoubtedly small, but he may have gained credit for more than he possessed by the tact arising from his large Secretiveness, which would give him cunning and insight into the character of those around him. He had, by virtue of his large Constructiveness, some mechanical talent, which, aided by his Imitation, Secretiveness, and Acquisitiveness, may have made counterfeiting possible to him, and certainly gave him aptitude for housebreaking, swindling, and all kinds of dishonest practices. His large Self-esteem, Destructiveness, and Combative-ness, would make him fond of power, overbearing, violent, cruel, and vindictive: not restrained by Conscientiousness or Benevolence, he would hesitate at no means necessary to make him the leader of a party. He had just Causality enough to render him specious. This, with his assumption, tact, courage, and perseverance, would lead inferior minds, and sometimes those really superior to him in intellect, to yield submission to his authority. If opposed, he is capable of any act of violence. I should not think he would have any irresistible tendency to a roving or seafaring life; but

* We are ignorant by what appearances in the skull the size of the organ of the Love of Life (if such an organ be ascertained), is indicated. Mr Barber is therefore invited to publish the result of his observations on that point.—EDITOR.

if circumstances made him a seaman, he was a daring one. He might shine in a privateer, or even as a pirate. He may have been attached to his party comrades, or to individuals, but he was incapable of entering into any scheme of general benevolence; hospitals, houses of refuge, missions, or charitable institutions in general, never called forth his sympathies. Did a tale of distress easily excite his pity or induce him to part with his money? I should say no. No phrenologist would waste much time or breath in trying to persuade him to do any charitable action. He would be prone to licentiousness and intemperance. With regard to his moral and religious character, having small Ideality, he would have little perception of the abstract beautiful, pure, or perfect. Having little Hope, Marvellousness, and Love of Life, he would feel no fear of annihilation, or desire of a future and better life. His small Conscientiousness and Benevolence would incline him to scoff at morality, and even to doubt its existence. He would be inclined to laugh at religion as priestcraft and delusion. His small Conscientiousness and Caution would make him little susceptible to remorse, and he probably died in old age as he lived,—hardened and impenitent. He was indebted to favourable circumstances if he did not terminate his days a convict. But such was his general aptitude for evil, that a phrenologist would hesitate to say to what crime he was most addicted. The circumstances in which he has been placed, have determined his course—always a criminal one.”

Mr Orange then rose and said, that he had not mentioned one fact connected with this skull, but that he would now inform the company that it had been sent to Mr Deville, requesting his opinion of the man, and that he held in his hand a copy of his answer. The announcement was loudly cheered, and Mr O. was requested to read it before the chairman produced the attested character of the man. Mr Deville writes—

“ This is an individual that would have some difficulty to keep within the pale of the law—a knowing character, sarcastic, and with some disposition to imitate the actions of others. He would be influenced by the lower feelings, his character partaking more of the animal than the amiable, and shewing but little feeling for religion or morality. Obstinate, self-willed, revengeful, with strong passions, and desperate if opposed. Not over-scrupulous in appropriating to his own use the property of others. If he has children he would not be a very kind parent—if they were not obedient he would be likely to act cruelly towards them. He is an individual that would become the leader of his party, such as a delegate in a mutiny, or a captain of smugglers, being fond of com-

mand. He would be more likely to spend his time in public-houses and with low society, being a great talker, and a presuming, knowing, and cunning character. He would shew some ingenuity, but more of cunning. To sum up, this is an individual who would have difficulty to keep out of trouble or a prison; and perceiving by the jaws that it is the skull of an aged person, I consider him as an old sinner and a criminal, and likely to lead others into trouble in company with him."

The striking coincidence between these two delineations produced great excitement and applause. The chairman then rose and presented the following character, written by one who had ample opportunities of knowing the man.

"Sir,—A. B., late a convict, aged seventy-eight years, was one of the most eccentric characters I have ever seen. He had been convicted several times, transported four times, three for seven years, and last for life. He was deaf, horribly passionate, violent and revengeful, not to be controlled, not even by officers, nor with threats of punishment. He was a great liar and a great thief. He would steal and conceal all he could lay his hand on, and swear and stoutly deny he had ever seen the article. He was very dirty in his person and habits. He had keen eyesight, though advanced in years, and was fond of using and learning loose and improper language, and rehearsing his scenes of riot and dissipation and his thieving exploits. We are not aware that he had any regular trade. He could neither read nor write, and was never content with his clothing or his mess, but would always snatch the one he thought the largest; he would carry his revenge for supposed injuries to a great extent, always threatening the lives of his fellow-prisoners. I have myself been often threatened by him, and violently attacked, and have been many times compelled to interfere when he has attacked others. He died of age and debility on the 13th of February 1827. He did not seem to have any idea of a future state, and when reproved by me for swearing and using obscene language, he would fly into a most violent passion."

II. *Pathological Fact confirmatory of Phrenology.* Reported by W. W. REID, Rochester, New York.

About the first of March 1835, I was called to see a lad, H. M'A., aged eight years. He had been sick some twelve or fourteen days. His disease had approached very gradually, and had been neglected, owing to the sickness of his father, who had lain at the point of death for some time, and finally

died but three days previous to my visit to the boy. I was informed by his mother, that he had for several days simply complained that he was unwell—next that his head ached—then that he could not sleep at night, he heard so many strange noises. In short, he had inflammation of the brain ; and, when I first saw him, had fever of a low grade ; was pale, restless, wakeful, delirious ; and was screaming, “ Oh, dear ! Oh, dear ! My head ! My head ! ” while his countenance was expressive of the utmost anguish. He would often seize upon a word that he heard, as when offered water he would repeat the word “ water ! water ! ” from five to twenty times in the same sharp key or tone, which was exceedingly painful to the attendants who were compelled to hear it. In order to obtain some relief to my own ear, I would frequently pronounce some other word, that he might catch it, and thus change somewhat the sound, which had from its monotony become so painful. Before he became so much reduced as he necessarily did from the disease and treatment, when asked where his pain was, he would uniformly place his hands upon the sides of his head, over and in front of the ears and say, “ My head ! my head ! ”

Notwithstanding he was treated very vigorously in the outset, yet no amendment of symptoms took place till his head was shaved, and two large blisters were applied, one on each side of the head. These were kept open and discharging for two weeks. From their first application he gradually grew better, and finally recovered.

As soon as he was sufficiently restored to be about his usual business, a remarkable change was observed in his character. Before his sickness, he was quite noted in his neighbourhood for his manliness, kindness, integrity, and obedience. The father being a very intemperate man, the mother chiefly supported the family with her needle. This boy was consequently employed to do a great many errands and other little domestic business usually done by older persons, such as making purchases at the market and groceries, procuring fuel, &c., all of which he did with correctness and fidelity. But after his sickness, when set about the same kind of business as formerly, he would keep part of the money given him from time to time to make purchases, and squander it for candy and trinkets. He would, moreover, borrow money in his mother's name, of the neighbours and grocery men, where he had been accustomed to trade, on pretence that his mother wanted it to pay rent, &c. In this way, too, he would obtain money and clandestinely go to the circus, contrary to express command ; and thus was continually cheating and deceiving his mother : yet when accused of the falsehood or theft, he would never deny

but readily acknowledge it, seem to be sorry and promise amendment, but would straightway go and do the same things, till he became quite as notorious for his deception and dishonesty, as he had formerly been for his candour and integrity. The mother, grieved and wearied out with his delinquencies, determined to send him into the country in order to remove him from temptation and reclaim him if possible. He remained some time, and returned somewhat improved, but it was six months, as she informs me, before he was fully restored; since which time, to the present, he continues to be, as before his sickness, a good and honest boy. He is now fourteen years of age. The mother and boy are both still residents of this city, besides several other living witnesses, who can and will testify to the same facts.

To the phrenologist, who has turned his attention to the subject, and acquainted himself with the numberless facts of a similar kind that abound in every community, this case is neither new, nor remarkable, nor inexplicable; but to those who reject Phrenology and adhere to the old systems of Locke, Reid, Stewart, Brown, &c., it will prove a sort of Gordian knot, that must be cut, not untied.

The above communication is at your service, to be used for the benefit of the science and the public.

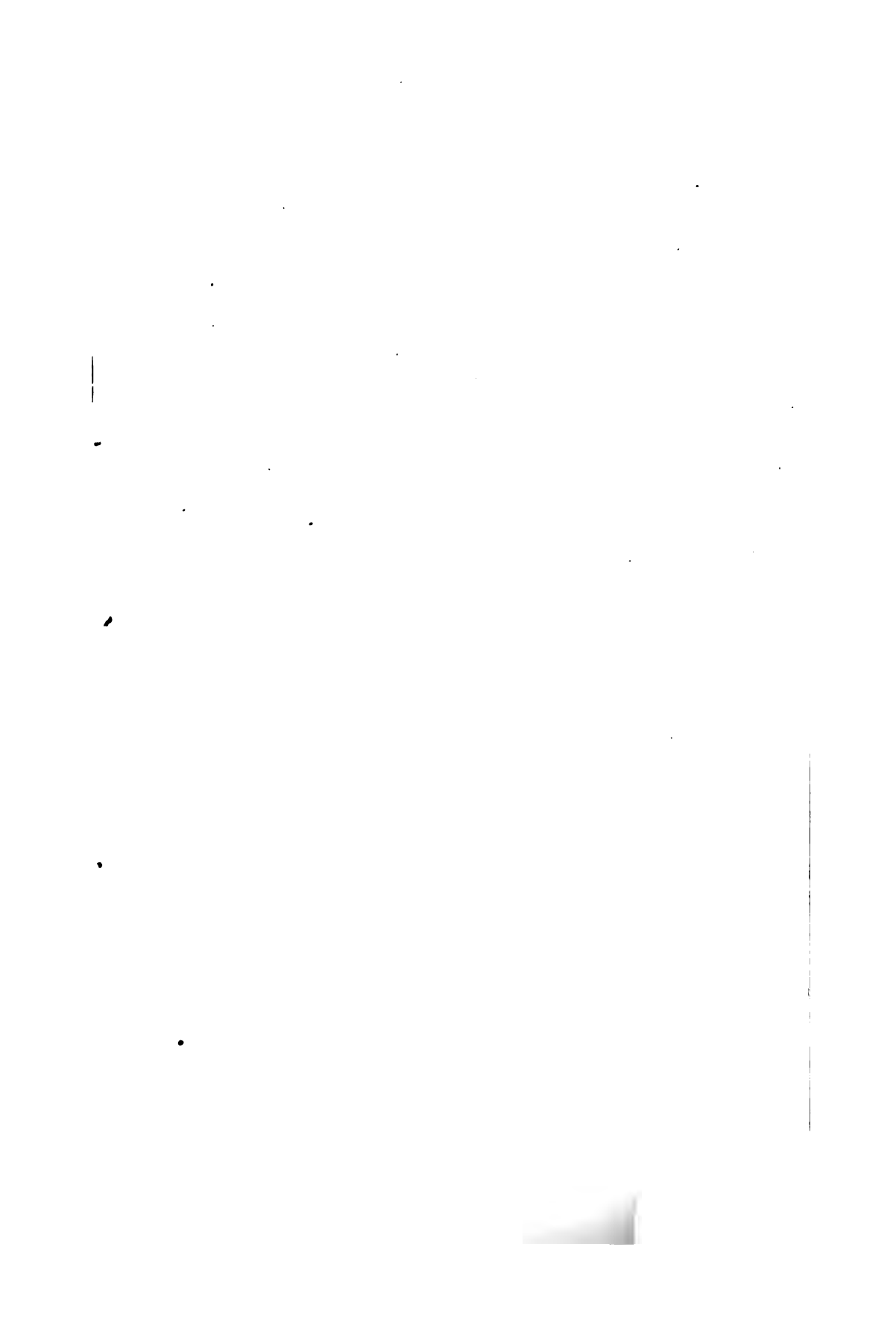
I have several other cases of a different character, bearing upon other points of Phrenology, which I may present at another time.—(*American Phren. Jour.*, April 1841.)

III. Case of Headach caused by over-excitement of certain Mental Faculties.

The following is an extract from a letter directed to Mr. L. N. Fowler, while recently lecturing on Phrenology in one of the New England states. The letter was written by a very intelligent lady, the wife of a clergyman; and we are assured that the facts here stated may be relied upon as strictly correct. Such facts, we presume, are by no means of unfrequent occurrence: were the attention of persons properly directed to the subject, almost any number might be collected. Mrs R— writes thus: "For some months past I have experienced a very great degree of pain in my head, which I have endeavoured to account for phrenologically, for this reason, viz. that it was always attendant upon unusual excitement of *mind*. This pain has been so severe at times, that I have feared it might terminate in dropsy of the brain. Still I cannot be satisfied with this conclusion, because the pain, though severe, frequently *shifts its position*, which I think would not be the case in dropsy. Since your lecture last evening, I have

examined the subject more fully, and called to mind more distinctly the *particular location* of the distress, which I was better able to do from the extreme acuteness of suffering that I have lately experienced. Allow me first to ask one question, viz. If pain be produced in the region of *one* organ which is *over-excited*, is it reasonable to suppose that, where there is great nervous excitability of temperament, several organs may be excited and cause pain *at the same time*, or successively? Now this is the fact respecting myself—when I suffer pain in any part of my head, there is perfect correspondence on *both sides* of it. I have felt it distinctly at these various points. In the region of *Constructiveness*, this has frequently been the case, after I have been cutting out a large quantity of work, and racking my invention to do it in the best and most economical manner; and also whenever I have been contriving plans or inventing games of amusement, or any thing of the kind, for my children's profit or pleasure. Again: such are my circumstances, that great care devolves upon me—the education of my children, the management of my domestic concerns, the control and disposal, to a great extent, of our finances; add to this, the absolute necessity of keeping up my spirits whether sick or well, in sunshine or in storm, in prosperity or in adversity. At such times the pain has been directly through the head, as it seemed to me, where the organs of *Combative-ness* and *Destructiveness* are located; and I have felt like this: 'Die I may, but go forward I must.' When attending closely to any discourse, or reading on argumentative subjects that require deep thought, my forehead is subject to distress and sometimes severe pain. I frequently suffer pain in the region of *Causality* and *Ideality*; and could enumerate many instances of this kind. One more fact only will I now mention. I am troubled often with pain over the eyes, and have noticed that whenever my children have disarranged every thing about the house, I am exceedingly annoyed, and after going about and replacing every thing in order, *my head* is very sensibly relieved."—(*American Phren. Jour.*, April 1841.)*

* Circumstances have hitherto prevented us from fulfilling our intention to notice the more recent Numbers of the *American Phrenological Journal*; in the mean time, the above and other two cases are extracted in our present Number as specimens of their contents. At the conclusion of vol. iii. (Sept. 1841), we observe the announcement that Dr N. Allen's connexion with it as editor was then to cease; and that, notwithstanding the loss of several thousand dollars which it has occasioned to the proprietors Messrs O. S. and L. N. Fowler, it will continue through a fourth volume by the former gentleman, as proprietor and editor,—another opportunity being thus afforded to the American public, to give a satisfactory solution of the problem, "Will they sustain a Phrenological Journal?"—EDITOR.





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R.L.B.



Drawn by E. Beaman, Esq.

IV. *Case of Bad Health from over-activity of Cautiousness.*

Read before the Phrenological Association at London, on 4th June 1841, by RICHARD BEAMISH, Esq.*

I beg to call the attention of the Association to an interesting and instructive case (which came under my own immediate observation), as affording another example of the benefits conferred on society by the great discovery of Gall.

R. P. B, the individual of whose head this is a cast, is a boy, eight years of age, of a nervous-sanguine temperament, the nervous greatly predominating, hazel eyes, and brown hair.

For a long period he had been under medical treatment for the most obstinate stomach and bowel derangements, with the usual reaction on the cerebral functions. Frequent changes of residence had been resorted to, and medical advice had been sought at every change; every thing that tended to induce excitement was studiously avoided; his studies were abandoned, and his food was administered with the most watchful care: in a word, all that regimen, medicine, and the most anxious parental solicitude were supposed capable of effecting, were tried in vain. Troubled sleep, nightly perspirations, loss of flesh, deranged digestion, irritability of nerves, all conspired to excite so much fear in his parents, that as a last resource they resolved, at much inconvenience, to undertake a long sea-voyage.

One evening in the month of March last, while the subject of the proposed voyage was under consideration, and about an hour after the child had been put to bed, his step was heard in the room adjoining that in which he slept, where a fire was always retained; his father quickly ran to ascertain the cause of the child having left his bed; but to the parent's surprise he was found lying quietly in his bed, without any appearance of having recently moved. He was asked whether he had been up. "No" was the answer; and, though pressed to acknowledge that he had left his room, he steadily, and without hesitation, denied it.

I should state that the child slept in the room with his parents; that he went to bed at half-past seven or eight o'clock, and they at about ten or eleven, or about three hours after him, when he was usually found quite awake, or in a troubled sleep. To continue.

The father, unwilling to excite an already overwrought frame, left him, simply telling him to try to compose himself to sleep. Not long after, however, the little step was again

* We are indebted to Mr Beamish for the accompanying lithographic views of the cast mentioned in this article.—EDITOR.

heard in the adjoining room, and again the anxious parent hastened to his child. The room was deserted, the child was in his bed, and apparently unconscious of there being any reason for his father's visit. Again he was taxed with having left his bed, and again he denied the charge, with the most perfect command of countenance. The father now, in a state of the most painful perplexity, scarcely knew what course to adopt, when suddenly the truth flashed across his mind.

The fire was observed to have burnt low, and to afford but little light to the one room, and none at all to the other; hence it was argued, on phrenological grounds, that a large *Cautiousness*, being painfully excited, had induced the child to seek the companionship which the cheering light of a fire offers; that an equally large Love of Approbation prevented his acknowledging his fears—the more, as he had been most injudiciously branded as a coward; and that Imitation, Secretiveness, and Firmness—all large—had enabled him to adhere with such apparent sincerity to his first denial.

When, therefore, on the following morning the sources from whence his feelings and actions had arisen were pointed out, and which he had no difficulty in comprehending, he burst into tears, and freely acknowledged that all was true. He was consoled, however, by the assurance, that though he stood condemned for almost the only untruth he had ever uttered, he should never again be left alone, but that some one should be appointed to remain in the contiguous apartment with a light, until his parents should retire to their bed. The result was, an immediate change in all the vital functions, particularly those of the stomach; the balance of the system was restored; the aspect of the little sufferer rapidly improved; and from that time up to the present he has enjoyed a state of health and of happiness to which he had been long a stranger, and for which, I have no hesitation in saying, he will, in after years, if life be spared him, be indebted to the power of that science which we are here met to honour, to cherish, and to propagate.

I shall only add to this simple statement, that the medical profession will soon discover, as many *individuals* of that profession have already discovered, that a knowledge of the cerebral functions, with the circumstances connected with their influence and development, is as essential to the formation of a correct judgment, as the characters, properties, and qualities of the mineral and vegetable kingdoms have hitherto been.

P. S.—29th October 1841. In addition to the foregoing statement, I may now mention, that the treatment which was adopted continues to be successful, and that the boy's health is as good, if not better, than that of most children.

V. *Cases in Bethlem Hospital, illustrative of the Pathology of Insanity.*

A late Report by Sir Alexander Morrison furnishes an account of the post-mortem appearances presented by the patients who died in Bethlem Hospital during the last five years. The number of deaths amongst the females was nineteen; amongst the males, twelve. The following cases are copied into the *Medico-Chirurgical Review* for October 1841, p. 561, whence we transfer them to our pages :—

Morbid Appearances in Females.

Case 1.—No deviation from the normal condition of the brain and membranes observed except congestion of the blood-vessels, both external and internal; the cerebral substance, the ventricles, and the arachnoid, were perfectly healthy. The left lung was hepatized, and marks of disease were observed in the chest and abdomen.

Case 7.—The blood-vessels of the brain and membranes turgid; the cellular texture of the pia mater on the convexities of the cerebral hemispheres largely infiltrated; the fluid in the lateral ventricles increased in quantity; there was much fluid in the cranium after the brain had been removed.

Case 8.—The convolutions of the cerebral hemispheres were partially flattened; the blood-vessels of the brain and membranes were loaded; when the dura mater was divided and detached, the subjacent membranes exhibited three or four small patches of a bright yellow discoloration, but no fluid could be squeezed out of them; the cut surfaces of the cerebral substance everywhere exhibited numerous bloody points; the lateral ventricles were distended with about two ounces of turbid fluid in each; there was thick yellow pus, about one or two tea-spoonfuls, in the bottom of the reflected horns of each ventricle; the lining membrane of the ventricles exhibited vascular ramifications and minute ecchymoses, and the arachnoid coat covering the pons varolii and neighbouring parts of the brain was thickened and opaque, and of a light yellow colour from purulent infiltration; the substance of the brain was soft, particularly around the ventricles and at the basis. The cause of these appearances is conceived by Mr Lawrence, to whom I am indebted for the description of the morbid appearances, to have been acute inflammation of the lining membrane of the ventricles and of the arachnoid coat.

Case 15.—Much blood escaped on dividing the integuments and sawing the skull, and the vessels of the brain and membranes were enlarged. Five or six quarts of fluid of a reddish colour were contained in the chest.

Case 17.—The blood-vessels of the brain and membranes were turgid; in other respects the contents of the cranium appeared healthy; marks of inflammation were visible in the pleura, in the cavity of which bloody fluid was contained.

Case 18.—A large quantity of blood escaped from the vessels of the head in cutting the skin and sawing through the skull; the vessels of the brain were moderately injected, and there was slight serous infiltration of the pia mater; in other respects the contents of the cranium were perfectly healthy, as also those of the thorax and abdomen.

Case 19.—In this case there was general fulness of the blood-vessels; sections of the cerebral substance everywhere exhibiting numerous divided orifices; there was serous infiltration of the pia mater; at some points of the cerebral hemispheres the convolutions were shrunk so as to leave conspicuous intervals, which were occupied by the infiltrated pia mater; the substance of the brain appeared to be healthy and firm; the trachea and larynx, the contents of the chest, and of the abdomen, were all perfectly healthy, exhibiting no appearance to throw any light on the very sudden death of this patient, which it was imagined might have proceeded from an affection of the heart or some large blood-vessel.

Morbid Appearances in Males.

Case 3.—Remarkable turgidity of the blood-vessels, in the substance of the brain especially; the superior longitudinal sinus filled with a coagulum firmly adhering to its sides like a recent clot, at two or three points gradually changed into a dull reddish brown fluid, of the consistence of pus; a large vein about the middle of each hemisphere greatly distended, and filled with a fine coagulum, presenting at some points a similar fluid; this vein terminated at each side in the cavernous sinus; other veins were filled with firm coagula; a considerable ecchymoses of the pia mater, and slight infiltration of that coat. The lungs were in parts hepatized, and contained an abscess.

Case 5.—Blood-vessels of the brain and membranes turgid; numerous bloody points in the cerebral substance, and the medullary matter presenting here and there a faint violet tint; slight serous infiltration of the pia mater in the cerebral hemispheres; about an ounce of clear fluid in each lateral ventricle. The lungs were diseased.

Case 6.—The blood-vessels of the brain and membranes extremely turgid; the cellular texture of the pia mater in a state of serous infiltration over the entire upper and lateral surfaces of the cerebral hemispheres; the lateral ventricles contained rather more than the usual quantity of fluid, and there was

much fluid in the basis of the skull. Extensive hepatization, with a large abscess in the lungs.

Case 7.—The arachnoid coat somewhat thickened and opaque, and the pia mater considerably infiltrated over the cerebral hemispheres; the lateral ventricles enlarged, and filled with transparent fluid; a considerable quantity of fluid in the basis of the skull; no deviation from the healthy state observed in the substance of the brain.

Case 8.—The blood-vessels of the brain and membranes turgid; numerous bloody points appeared in every situation; the arachnoid coat thickened and partially opaque, especially along the edges of the fissure between the cerebral hemispheres; the cellular substance of the pia mater in the hemispheres considerably infiltrated. The structure of the brain appeared natural.

The mucous membrane of the trachea and bronchii of a bright red, and covered with a thick yellow secretion; the lungs adhered to the sides in several places; contained an abscess and an enlarged bronchial gland containing a substance like putty.

Case 10.—The blood-vessels of the brain and membranes were turgid; the arachnoid coat on the cerebral hemispheres was considerably thickened and opaque; there was great infiltration of the pia mater, and an increased quantity of fluid in the ventricles.

VI. Case of Change of Character, accompanying Disease of the Brain. By H. A. BUTTOLPH, M.D., Sharon, Connecticut.

Mrs P. of —, in Connecticut, aged eighty-four, of nervous bilious temperament, had been deranged about eleven years at the time of her decease, which occurred early in February last. Prior to the date of her derangement she had suffered much from functional disease of the stomach. She naturally possessed decided practical business talents as a landlady, and was fond of the pecuniary avails of her efforts. She was affectionate in her family, kind and hospitable to strangers, uniformly consistent in her moral and religious character, and, although reserved in her manners, yet generally cheerful. The first indications of derangement which her daughters (with whom she lived) observed, was a fear that she was losing her property, and that they (her daughters) were secretly appropriating it to their own use.

This suspicion was at first cautiously expressed, but she grew more and more bold in her accusations that they were taking her property unjustly, until at length she became entirely alienated in her feelings towards them—would say she meant to kill them, and would frequently, by open and by secret means, attempt to injure them. For a length of time, however, she would converse rationally with her neighbours when they called in to see her, and would manifest her usual degree of interest in their welfare. During the latter part of her derangement she became exceedingly violent in her temper, making unceasing efforts to injure and destroy every thing in her way. Her language was rarely profane, though often extremely vulgar. Near the close of her life the powers of her mind were greatly enfeebled, and finally she died in a state of almost complete fatuity.

Her brain was about the medium size, with no greatly disproportionate development in any particular part except that of Cautiousness, which was decidedly large in proportion to either the coronal or the superior frontal regions. The posterior and lateral regions, embracing the phrenological organs of Philoprogenitiveness, Adhesiveness, Combativeness, Destructiveness, and Acquisitiveness, were full, and there was a preponderance somewhat of the perceptive over the reflective organs in the anterior region.

Anatomical Appearances.—On piercing the dura mater there was an escape of a watery fluid to the amount of from three to four ounces; the vessels of the pia mater were highly and universally engorged with blood. The general consistence of the brain was much increased. Effusion of from two to four drachms was found in the lateral ventricles; and softening, with change of colour to a greenish-yellow, of the posterior portion of the middle lobe of the left hemisphere. The softened portion embraced the organs of Philoprogenitiveness, Adhesiveness, Combativeness, and a part of Destructiveness.

It may also be remarked, that the internal carotid arteries were pretty firmly ossified for three-fourths of an inch after leaving the carotid canal, through which they pass to the brain. —(*American Phren. Jour.* March 1841.)

III. NOTICES OF BOOKS.

- I. *Criminal Jurisprudence considered in Relation to Mental Organization.* By M. B. SAMPSON. London: Heighley. Edinburgh: MacLachlan, Stewart and Co. Dublin: Currie and Co. 1841.

“Kindness to criminals! Really those phrenologists! Their original, or *organical* madness, is sanity to their applications, their ‘*practical* philosophy!’ Prove to me that oil is the best extinguisher of fire, and I will admit that the best cure, nay the best *example*, for they go that length, for the ‘double-distilled villain,’—the truculent, ruthless, bloody, midnight ruffian, who defrauds, despoils, maims, tortures, mutilates, and murders his helpless victims; who stabs in the dark, cuts the throat of the sleeper, throws vitriol in the face, or beats a woman to death with an iron crow-bar, is to lodge him comfortably, work him pleasantly, feed him substantially, speak to him gently and encouragingly, give him all your heart and *try* to get his, and administer to him a liberal, gentlemanlike education! Away with such drivelling! Tie me the miscreant up, flay him with the cat-o’-nine-tails, and then hang him like a dog, as he is, for a terrible example to all similarly disposed wretches!”

Thus speak, on the punishments, the very same propensities, the excessive activity of which leads to the crimes; and thus, in the nature of things, have these propensities, when acting blindly, defeated their own end since the beginning of the world to the present day, proving that “the wrath of man worketh not the *righteousness* of God.”

There is no contrast in human affairs more violent, more jarring to old habits of thinking, than that which the proposed new treatment of criminals has presented to the present age, compared with the old; and we cannot wonder that when the “wild theory” is propounded to them, the shocked feelings of the vengeance-upholders should find vent in something like the climax of indignant points of admiration with which we have commenced this article. Phrenology has been ignorantly said to be inconsistent with, and hostile to, Christianity; and yet it oddly happens that its doctrines not only come to conclusions in perfect harmony with Christianity, but furnish fresh light, and give new practical value, to much in the teachings of that code, which it has been hitherto the custom to rote over without testing it by the understanding, or applying it to the heart. Of this we could give many examples were this the place. One

we cannot withhold as particularly applicable to this discussion. Benevolence is moral power, say the phrenologists, while violence and selfishness are moral weakness. Benevolence is the blessed engine wherewith, as the ultimate end of human improvement, peace on earth, good will, and brotherly love, the Allwise has most obviously intended that man shall move man. What says the Sermon on the Mount? "THE MEEK SHALL INHERIT THE EARTH." Of the millions to whom this has been weekly preached, what proportion have understood it in its vast, its glorious, its eternally true meaning? Our unhappy criminal brethren are not to be denied the powerful dispensation of Christian meekness. The self-proclaimed scourge-wielders and hangmen are not the meek. *They* will not inherit the earth; they will be defeated by their own hands; they prefer to take the sword, and will "perish by the sword." There are journalists advocating severity, who emblazon the Bible on their sheet. We would beseech them to open the sacred volume, and actually read it. We would direct their eye to two passages in Matthew's Gospel, ix. 13, and xviii. 21, 22: "I will have mercy and not sacrifice;" and, "Lord, how often shall my brother sin against me, and I forgive him? Till seven times? Jesus saith unto him, I say not unto thee until seven times, but until seventy times seven." Are these to be held by Christians meaningless words? Shall phrenologists be denounced as dreamers, who hold them to be full of meaning, who advocate a treatment of those who sin against them of the same character with, but short in benevolence of, that which the Saviour enjoins? If it be asked, Why was resentment—Destructiveness—given to man, if it is not to be used? We answer, that Destructiveness has many other uses better than resentment. This last, reason, benevolence, and justice, all combine to tell us, is a self-protecting power, to be kept in reserve for the absolute necessity of self-preservation. It might be called for against wild beasts, or wild men in the woods, or wherever there is no legal protection. We answer farther, that Christianity was given to restrain resentment, and that it is not only unnecessary, but monstrous, to infuse it into that engine, strong without it, called the Law, which can do infinitely more by Christian benevolence than by heathen cruelty; and, while it can afford to forgive seventy times seven the sin, benevolently restrains the sinner from farther injuring either his fellow-creatures or himself, and puts him in the way of that reformation which was never yet realized, and never will be, but by that same kind treatment and intercourse which our opponents call sentimental twaddle, the encouragement, and not the suppression of crime. The phrenological, like the Chris-

tian, doctrine is this, that all beyond necessary restraint and kind treatment is VENGEANCE, and vengeance is not the province of man.

The Marquis Beccaria of Milan, a master-mind far in advance of the age in which he appeared, created much alarm in Europe, early in the last century, by denouncing cruelty to criminals, and boldly protesting against capital punishment itself. His views were violently resisted, his personal safety even was threatened; yet his philosophical and philanthropic pages undoubtedly began a gradual improvement in criminal jurisprudence, and brought forth, slowly even in England, a more humane legislation, of which Howard was the pioneer, and Bentham and his pupil Romilly were the prime movers. Beccaria died before Phrenology was discovered, and neither Bentham nor Romilly, although they lived to see its arrival in England, took any aid from it, or knew, it may be, that it had any aid to give. Yet it is more than an application of Phrenology, it is Phrenology itself, to observe the working of the crime-producing propensities when acting without control; while the questions of responsibility, guilt, restraint, punishment, prevention, and protection, all force themselves on the notice of the philosophical student of the science. Gall and Spurzheim were early led to deal with the principles of criminal jurisprudence. In the first volume of his work on the Functions of the Brain, Dr Gall devotes a chapter to "the application of his principles to man, considered as an object of correction and punishment." Although there is much in that chapter characterized by the soundest views of criminal treatment, there is an admixture of doctrines, which the American translator, Dr Winslow Lewis, has wondered at as the dictates of Destructiveness. Dr Gall advocates capital punishment as a means of intimidating malefactors; and, in atrocious cases, thinks it ought to be slowly and painfully inflicted. Later phrenologists have, we think, improved upon the suggestions by Dr Gall on this subject. Dr Caldwell published the first phrenological work in a separate form on the subject; entitled, "New Views of Penitentiary Discipline, and Moral Education and Reformation of Criminals." It appeared in America ten years ago, and was reprinted in the seventh volume of this Journal, pages 385 and 493. Mr Combe had previously written on the principles of criminal legislation in vol. iv. p. 559; and the subject was resumed by him in vol. viii. p. 109. In the same volume (p. 481), Mr Simpson contributed a paper On the practical Application of the Principles of Phrenology to the Penitentiary System; and he offered the new views to

the *non-phrenological* public, in two treatises—the first entitled, “Hints on the necessity of a change of principles in our Legislation for the efficient protection of Society from Crime, and Treatment of Criminals;” and the second, “Observations on the degree of knowledge yet applied to the plea of Insanity in trials for crimes, chiefly of Violence and Homicide.”* These papers appeared in the *Edinburgh Law Journal*, Nos. VIII. and VI., 1834, 1833. Separate copies were circulated among statesmen, judges, and medical men of eminence, and, as we have reason to know, made a considerable impression, which has since had good consequences. These treatises are also appended to the first edition of Mr Simpson’s volume on National Education. Mr Combe has pursued the subject in the second edition of his “Constitution of Man,” published in 1835, and recently in his “Moral Philosophy.”† Much has been done in the Legislature to mitigate the, till lately, disgracefully sanguinary, vindictive, and most unchristian and self-defeating criminal code of England; in which labours of humanity, the names of Lennard, Campbell, Kelly, and Ewart are honourably prominent;—the last distinguished by the noble, though yet unsuccessful, attempt to blot out utterly the punishment of death from our statute-book. It is instructive, however, to observe, that none of these advocates of a milder system, not excepting Mr Ewart, who is in advance of the rest, were prepared to seize the strong ground of the new philosophy, and that they were, in consequence, baffled by old prejudices existing all around them, and even lingering in their own minds.‡

The Letters of Mr Sampson now before us, have the merit, not of originating the phrenological views on their subject, but of expounding them with great force and beauty, and setting some of them in lights so new and striking as almost to claim the character of originality. We therefore welcome Mr Sampson as a most valuable accession to the band of phrenological advocates of sound criminal jurisprudence.

We are not surprised that the periodicals which have noticed these Letters speak of them in high terms of commendation, and recommend them earnestly to the attention of the public. They first appeared *seriatim* in the *Spectator*, and are now collected and published at a low price, under the auspices, and

* Dr Andrew Combe had previously, in his work on Mental Derangement, treated of this last subject.

† There is an excellent and enlightened article in the *Foreign Quarterly Review* (vol. xii. p. 49), on the Humane System in Penitentiaries.

‡ Mr Simpson has, since these recent discussions, contributed to the *London Monthly Chronicle*, a paper against capital punishments.

at the cost, of the Henderson fund in Edinburgh for the promotion of phrenology and its applications. They are six in number—and we cannot do better than enumerate, in the form of *theses*, the several points of doctrine which they contain.

1. Crimes proceed from the action either of diseased organs of the brain, or of unbalanced organs, those of the propensities being too large and powerful for the control of the moral and intellectual faculties.*

2. Disease of brain, and irregularity or want of balance, are both insanity, in the widest sense of the word.

3. Both defects are transmitted to offspring, and may be aggravated by circumstances.

4. Both defects are misfortunes which bring the unhappy individuals within the category of patients; and it is as cruel and absurd to punish, by superadded infliction, these sufferers in the brain, as it would be to punish them for labouring under disease of any other part of their bodies.

5. The plea of insanity, when a crime is committed, ought not to take away responsibility; so that, when a criminal is tried, there need be no inquiry into sanity and insanity, and their delicate and almost unascertainable boundaries.

6. But this responsibility, in which there is no exception whatever, is not to be followed by the infliction of *vindictive punishment* in any case (this it is neither just nor expedient for man to inflict); but to be followed by restraint, and, if possible, cure and reformation.

7. As this restraint, which will be society's protection from its dangerous members, and the curative and reformatory process, are necessarily tedious and painful, though, like medical cures and surgical operations, benevolent, they will operate in the way of example, upon all whom example ever sways, as much as pain positively inflicted in the way of vindictive punishment.

8. Capital punishment is not curative, but purely vindictive.

9. Death is rarely dreaded, often courted, and oftener still anticipated by suicide, at the time when the destructive organ is overpowering all the restraining organs, and is wrought up to the homicidal point; so that homicide, suicide, and fire-raising, are often simultaneously the acts of one state of mind. Capital punishment, therefore, even if retained for every

* "The form of head in all dangerous criminals is peculiar. There is an enormous mass of brain behind the ear, a comparatively small portion in the frontal and coronal regions. Such a conformation always characterizes the worst class of malefactors; and wherever it exists, we find an excessive tendency to crime."—*Macnish*.

other crime, ought especially to be abolished in those where our legislators would yet retain it—murder and fire-raising.

10. The spectacle of capital punishments excites the homicidal tendency in the predisposed spectators, and is the cause of new murders. This, with the publicity given to the details of murders, renders the tendency often epidemical.

11. Homicide may be prevented in an individual by subjecting him early to suitable education, and, on conviction of his first violence, to reformatory restraint and treatment.

12. When the destructive tendency has reached actual homicide, the unhappy individual should be put under restraint for life, and ought never to be intrusted with liberty to repeat the act.

The author devotes his six Letters to the illustration and proof of these various predicates.

1. To a phrenologist the first is a truism: The author says,—"When a man commits a crime, it is the custom to exclaim that 'he *ought* to have known better.' Now, if he was, from natural deficiency of the reasoning or moral powers, unable to perceive that he was doing wrong, it cannot be disputed that he was of unsound or partially idiotic mind. If, on the other hand, he did possess the power to perceive the right course, and yet was unable to act up to his conviction, it is evident that he possessed a brain of such an irregular formation, that the higher mental powers bore no sufficient relation to the lower propensities which it is their duty to control; and that the latter, when roused by the presentment of their own stimuli, possessed a strength so disproportionate as completely to overpower the former. If, while in this state, he commits a crime, he will exclaim that 'he could not help it,' or that the devil (*i. e.* the cerebral organ of the offending propensity) was too strong for him. His judgment, in fact, was strong enough, under ordinary circumstances, to teach him the erroneous tendency of his passions; but it was not strong enough to prevent his falling, when those passions, always disposed to disproportionate action, became suddenly excited by some external cause. In such cases, the mental balance is completely lost, and he is reduced to a state of relative insanity. Under these circumstances, the 'responsibility' which attaches to the result of his conduct should be (and under the operation of the Divine laws certainly is) shared by those who, being too ignorant to estimate the nature of his infirmity, suffered the exciting causes to be placed in his way, instead of endeavouring to repress the activity of the overruling propensity by withholding the objects of temptation, and by appealing to his higher but hitherto neglected powers."—"In the writings of

Jeremy Taylor, of whom it has been truly remarked, that his influence and authority in the Church, whether for power and splendour of mind, orthodoxy of belief, or sanctity of deportment, have never been surpassed, I find the following passage : — ‘ If a man be exalted by reason of any excellence in his soul, he may please to remember that *all souls are equal* ; and their different operations are because their *instrument* is in better tune, and their body is more healthful or better tempered ; which is no more praise to him than it is that he was born in Italy. On the other hand, if his course entitles him to no reward in this world beyond the natural one of the inevitable happiness of mind which Heaven has decreed to be the consequence of its physical health, so it is but fair to allow that the opposite course can merit no punishment beyond the inevitable pain which Heaven has decreed to be the consequence of its physical derangement. If the argument is good for any thing, it must tell both ways with equal force.’ ”

2. Although we *may* take insanity in the wide sense of the second point of doctrine, as it is defined by the author, yet, as all writers on the subject limit the term to *disease* of brain, either organic or functional, there is some danger of confusion of thinking and expression, in the author’s unlimited sense of the word ; and although it makes no difference as to the necessity of restraint and treatment, whether the brain be diseased or irregular, it does make a great difference as to what that treatment shall be. There may be a wide difference as to reformability between the diseased and the ill-balanced but still healthy brain ; and as the author does not propose that the penitentiary shall be merged in the lunatic asylum, this difference would be the very ground of decision, to which of these the individual should be sent. It was not required, we think, for the author’s general argument to extend the meaning of the term insanity. Responsibility is as applicable to the two conditions of brain separate as conjoined ; and when we come in practice to the question of the kind of treatment, we must distinguish them. Jurisprudentially, the difference would occasion no difficulty. The jury’s first and main inquiry would be, Has the accused committed the crime ? If he has, restraint must be his sentence. It might appear in the evidence, or be subject of future inquiry, whether he is lunatic in the restricted and ordinary sense, namely, from disease of brain, or criminal from the action of irregular though healthy brain. Mistakes might take place, but the evil, being limited to a mere misplacement of the convict, would not be great, and would be capable of rectification. Even as things now are, a

lunatic convict would be removed from the hulks to an asylum. There would, however, be an end of rectification, if a mistake as to the character of the convict's impulses should result in his being hanged. The principle that a criminal can never be *vindictively punished* as the consequence of any error which it is possible to commit, is a beautiful result of these views, and a most consolatory reflection to the just and benevolent mind.

In his appendix, the author quotes from Mr Combe's "*Moral Philosophy*," to which he acknowledges his obligations, the following passage:—

"If the principles which I advocate shall ever be adopted, the sentence of the criminal judge, on conviction of a crime, would simply be one finding that the individual had committed a certain offence, and was not fit to live at large in society; and therefore granting warrant for his transmission to a penitentiary, to be there confined, instructed, and employed, until liberated in due course of law. The process of liberation would then become the one of the greatest importance. There should be official inspectors of penitentiaries, invested with some of the powers of a court, sitting at regular intervals, and proceeding according to fixed rules. They should be authorized to receive applications for liberation at all their sessions, and to grant the prayer of them, on being satisfied that such a thorough change had been effected in the mental condition of the prisoner, that he might safely be permitted to resume his place in society. Until this conviction was produced, upon examination of his dispositions, of his attainments in knowledge, of his acquired skill in some useful employment, of his habits of industry, and, in short, of his general qualifications to provide for his own support, to restrain his animal propensities from committing abuses, and to act the part of a useful citizen, he should be retained as an inmate of a prison. Perhaps some individuals, whose dispositions appeared favourable to reformation, might be liberated at an earlier period, on sufficient security, under bond, given by responsible relatives or friends, for the discharge of the same duties towards them in private which the officers of the penitentiary would discharge in public. For example, if a youth were to commit such an offence as would subject him, according to the present system of criminal legislation, to two or three months' confinement in Bridewell, he might be handed over to individuals of undoubtedly good character and substance, under a bond that they should be answerable for his proper education, employment, and reformation; and fulfilment of this obligation should

be very rigidly enforced. The principle of revenge being disavowed and abandoned, there could be no harm in following any mode of treatment, whether private or public, that should be adequate to the accomplishment of the other two objects of criminal legislation—the protection of society and the reformation of the offender. To prevent abuses of this practice, the public authorities should carefully ascertain that the natural qualities of the offender admitted of adequate improvement by private treatment; and, secondly, that private discipline was actually administered. If any offender liberated on bond should ever reappear as a criminal, the penalty should be inexorably enforced, and the culprit should never again be liberated, except upon a verdict finding that his reformation had been completed by a proper system of training in a penitentiary.”

5. and 6. To the extension of responsibility, and its benevolent end and object, as laid down in the author's fifth and sixth positions, we not only have no objection, but esteem it the chief merit of his treatise to have placed these important points in so clear and satisfactory a light. He claims to have suggested “a new view of the nature of responsibility, of a wider character than that which at present obtains, in the hope that a system of criminal treatment may be based upon it, which, while it is unchangeable in its principles, and certain in its effects, will also harmonize more fully with an advanced knowledge of man's physical organization, and with the clear and benignant doctrines of Christianity.” We can scarcely concede to the author the merit of a view absolutely novel; for it is the very basis of the phrenological doctrine of crime, that its perpetrators are patients, for whom, without exception, it claims curative and reformatory treatment: but we do admit that the doctrine was never put into so practically convenient a form.

When an individual perpetrates an act which comes within the definition of a crime (assuming in the argument that definition correct), he manifests in that act either an *unbalanced* or a *diseased* cerebral organization. According to Mr Sampson, it matters not which; for in both cases the individual is to be held *responsible* to society. What a vast proportion of those to whom this sweeping predicate should be stated, would, from their habits of thinking, jump to the conclusion that Mr Sampson actually means that, whether committed by the sane or the insane, a crime is a crime, and should be followed by “the *vengeance* of the law,” called punishment. Mr Sampson

means to utter no such absurdity. His sweeping predicate is intended to relieve criminal jurisprudence from its most difficult and dangerous task, namely, to fix that unascertainable point, that ideal line, where responsibility ends and irresponsibility begins, and the condition of the offender's brain at the time of the act; and at once to attach responsibility to the act when simply proved to have been committed. But mark the difference between Mr Sampson and the said vast proportion; the responsibility which he concedes, is the same which the patient in typhus fever incurs, namely, to be put under treatment, separated, and confined, for the sake of his own cure, and society's protection from him as a dangerous member. The author's own words are:—"The doctrine of responsibility which appears to me to be alone consistent with reason, religion, and morality, is simply this,—that, so far from the Creator having sent into the world some beings who are responsible, and others who are exempt from responsibility, *there is in fact no exception whatever*; and that every human being is alike responsible;—responsible (according to the degree of his departure, either in mind or body, from the degree of sanity necessary to the proper discharge of his social duties,) to undergo the painful but benevolent treatment which is requisite for his cure."

The author is most successful in answering the objections which might be expected to arise in the minds of those whose inveterate association of crime with penal, that is, vindictive consequences, must subject them to a violent shock when such a novelty is propounded to them as the thesis, "that the infliction of punishment for disorders of the brain is no more reconcilable to our ideas of justice, than would be the infliction of punishment for disorders of any other organ of our physical frame." These objections are,—

1. That this doctrine would destroy all ideas of responsibility. The author, on the contrary, demonstrates that it would put responsibility on its right footing.

2. That it would leave all men to follow their inclinations with impunity. On the contrary, it is proposed instantly, on the commission of crime, to deprive the individual of that very license. And,

3. That, as it would enforce no punishment on offenders, it would present nothing that would deter others from following their examples. On the contrary, the restraint, long confinement, and painful course of cure (the last violently contrasting with all the individual's criminal indulgences), applied, although they be, like a surgical operation in benevolence and

not in revenge, would operate as powerfully in the way of example, upon all whom example ever sways, as the severest punishment positively inflicted. An amputated limb, we take to be a more serious warning than the severest flogging. We cannot withhold the following extract, which concludes the third Letter :—

“ Let any man contemplate for a moment the possibility of his being placed in a situation where all the long-cherished and strongest tendencies of his mind are opposed, and where the only feelings that he is permitted to gratify, are those, the exercise of which has, up to the present moment, been most distasteful to him. He may then form some idea of the painful nature of those moral remedies which have cure, and cure only, for their object. Let the religious man contemplate what his sensations would be were he forcibly held in a situation where only the grossest impiety and blasphemy were breathed around him, and amid which he should be compelled to exist without the power of expostulation or resistance. Let the benevolent man imagine himself compelled to watch day by day in some inquisitorial cell the infliction of torture upon helpless and unoffending fellow-beings. Let the mother who has found all her delight in the presence of her children, contemplate what her feelings would be if they were withdrawn for ever from her sight and knowledge. The pain which would be felt in these instances would, nevertheless, not exceed that which must be felt by those who are suddenly forced to abandon the gratification of long-loved vices, which arose from the predominance of the lower feelings, and to submit to a discipline, of which cleanliness, industry, justice, subordination, and a consideration for the feelings of others, are the prominent features. Yet, in the latter case, the pain inflicted would only be subservient to kindness—it would be that which had been decreed by Heaven, and not revengefully administered by man. Between man and man, however different their relative situations may be, nothing but love should ever subsist. He who lives in the practice of religion and virtue, should not look even upon one who is staggering in the wild intoxication of crime with any other feelings than the love and pity which the sad fate of a brother should awaken—love for him as a fellow-man possessing the same capabilities of an eternal destiny, liable to the same sufferings, and sharing, all misused, neglected, conflicting though they be, the same inherent feelings. If we could cure the evil dispositions of men without the infliction of any pain whatever, it would be our duty to hail the opportunity of doing so, instead of looking out eagerly,

yet unsolved problem of the reformability of criminals.* We would earnestly recommend to those who are to work this new machine, whom we personally know to be highly enlightened, judicious, and benevolent men, to read and reflect on Mr Sampson's treatise, and the others of the same school. If once their minds become imbued with these simple and most practical views, however they may be controlled in externals by prejudices yet lingering in higher places, they must at least retain the power to be mild and humane even to the hardened criminal—hardened often by a long course of injudicious and unjust treatment under the existing laws and customs of society—to turn away his wrath by, to him, unwonted soft answers, to gain his confidence, and encourage his efforts towards amendment. The moment the veriest ruffian is brought to say, or to think, with Orlando,

"Speak you so kindly! pardon me, I pray you;
I thought all things were rude and savage here,
And therefore put I on the countenance
Of stern defiance."

the victory is gained.

We have the happiness to know an excellent lady, wife of one of the government inspectors of prisons, who works zealously with her enlightened husband in encouraging both prisoners and prison-keepers to self-improvement; and who, on speaking kindly to a poor girl under sentence of transportation for theft, was answered by a flood of tears, and this memorable, this bitter reproach on vindictive and unjust society: "Madam, had I ever in my life been spoken to as you now speak to me, I should not have been here." What a satire, too, upon the senseless punishment of transportation! Was that poor girl a subject for it!

The Penitentiary at Perth—we wish it may be called the *Reformatory*, as better suiting its character of a moral hospital—is expected to adopt the best of the American system. We trust it will improve even on that, and be yet a model to the world.

* We must not forget Captain Macenochie's experiments on kindness to the doubly-convicted felons of Norfolk Island, which have justly excited so much interest. See his work on *Convict Management*. Captain M. has for many years entertained, and acted upon, phrenological opinions.

But the note itself was in types, evidence has arrived of his success even with his own expectation, after a year's trial. See Article III. of *the Quarterly Review*, p. 22. The "Quarterly Review" (June 1841), true to the spirit of *Conservatism*, sneers at the Norfolk Island experiment, and would be much comforted by its failure; or, which is more to the point, the appointment of a new Conservative military officer at once, and restore the fetters and the cat-

2. *The Phrenological Almanac ; or Annual Journal of Mental and Moral Science.* No. I. Edited by D. G. GOYDER. Glasgow : S. & A. GOYDER. 1842. 8vo.

This annual publication is in the shape of a pamphlet of seventy-two pages. It "proposes to supply some general information upon the science, and in the *cheapest possible form* (one shilling.) Like other scientific 'Almanacs' it devotes its pages almost exclusively to the consideration of its particular topic, declining all irrelevancies, and initiating the tyro in his studies in a popular and interesting manner." The first article is a spirited, but rather too declamatory, introductory lecture on Phrenology, delivered at Newcastle by Mr Alex. Falkner, illustrated by a lithographic plate applying Camper's facial angle, and Blumenbach's vertical rule, to a variety of heads of men and animals. There follow seven other articles, viz. Classification of the mental powers and their cerebral organs, with two views of an illustrative bust—Case of Inability to perceive Colours—Inference of Character from development—Professional Study of Phrenology one of the means of elevating the Educator to his proper position in Society—on Measuring and Recording the Phrenological Development of the Head, read by Mr John Isaac Hawkins to the Phrenological Association, met in London 3d June 1841—Hawkins's Craniometer; with an engraving of the Instrument—Measurement and Development of the cast from the head of Mrs Jeffray, executed at Glasgow, 21st May 1838, for murder by poison. These articles, although, with the exception of those by Mr Hawkins, presenting nothing new, are not without interest, and may have the effect of inducing those, to whom the entire subject is a novelty, to prosecute the study of it. We would, in an especial manner, strongly recommend the fifth article, on the elevation of the educator. It is written in a concise, spirited, and convincing manner, and will well repay the time of perusal. Its severe but just censure of the interference of ignorant committees with the teacher is excellent.

Of Mr Hawkins's Craniometer, which he offers as preferable to the common callipers, except in measuring the distance of any two *accessible* points, the following description, extracted from the *Lancet*, is given:—

"At a Meeting of the Phrenological Association, June 3d, 1841, John Isaac Hawkins, Esq., read a paper 'On Measuring and Recording the Phrenological Development of the Head.' He stated that on reading Forster's work on Phrenology twenty-six years ago, he determined to test the science by accurate measurements of the head; and he has diligently sought, ever

yet unsolved problem of the reformability of criminals.* We would earnestly recommend to those who are to work this new machine, whom we personally know to be highly enlightened, judicious, and benevolent men, to read and reflect on Mr Sampson's treatise, and the others of the same school. If once their minds become imbued with these simple and most practical views, however they may be controlled in externals by prejudices yet lingering in higher places, they must at least retain the power to be mild and humane even to the hardened criminal—hardened often by a long course of injudicious and unjust treatment under the existing laws and customs of society—to turn away his wrath by, to him, unwonted soft answers, to gain his confidence, and encourage his efforts towards amendment. The moment the veriest ruffian is brought to say, or to think, with Orlando,

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Since this note itself was in types, evidence has arrived of his success beyond even his own expectation, after a year's trial. See Article III. of our present Number, p. 22. The "Quarterly Review" (June 1841), true to the cause of indiscriminate *Conservatism*, sneers at the Norfolk Island experiment, and no doubt would be much comforted by its failure; or, which is the same thing, by the appointment of a new Conservative military officer as governor, to end the "foolery" at once, and restore the fetters and the cat-o'-nine-tails.

2. *The Phrenological Almanac ; or Annual Journal of Mental and Moral Science.* No. I. Edited by D. G. GOYDER. Glasgow : S. & A. GOYDER. 1842. 8vo.

This annual publication is in the shape of a pamphlet of seventy-two pages. It "proposes to supply some general information upon the science, and in the *cheapest possible form* (one shilling.) Like other scientific 'Almanacs' it devotes its pages almost exclusively to the consideration of its particular topic, declining all irrelevancies, and initiating the tyro in his studies in a popular and interesting manner." The first article is a spirited, but rather too declamatory, introductory lecture on Phrenology, delivered at Newcastle by Mr Alex. Falkner, illustrated by a lithographic plate applying Camper's facial angle, and Blumenbach's vertical rule, to a variety of heads of men and animals. There follow seven other articles, viz. Classification of the mental powers and their cerebral organs, with two views of an illustrative bust—Case of Inability to perceive Colours—Inference of Character from development—Professional Study of Phrenology one of the means of elevating the Educator to his proper position in Society—on Measuring and Recording the Phrenological Development of the Head, read by Mr John Isaac Hawkins to the Phrenological Association, met in London 3d June 1841—Hawkins's Craniometer; with an engraving of the Instrument—Measurement and Development of the cast from the head of Mrs Jeffray, executed at Glasgow, 21st May 1838, for murder by poison. These articles, although, with the exception of those by Mr Hawkins, presenting nothing new, are not without interest, and may have the effect of inducing those, to whom the entire subject is a novelty, to prosecute the study of it. We would, in an especial manner, strongly recommend the fifth article, on the elevation of the educator. It is written in a concise, spirited, and convincing manner, and will well repay the time of perusal. Its severe but just censure of the interference of ignorant committees with the teacher is excellent.

Of Mr Hawkins's Craniometer, which he offers as preferable to the common callipers, except in measuring the distance of any two *accessible* points, the following description, extracted from the *Lancet*, is given:—

"At a Meeting of the Phrenological Association, June 3d, 1841, John Isaac Hawkins, Esq., read a paper 'On Measuring and Recording the Phrenological Development of the Head.' He stated that on reading Forster's work on Phrenology twenty-six years ago, he determined to test the science by accurate measurements of the head; and he has diligently sought, ever

since that time, for the best methods of measuring and laying down on paper the various dimensions and curvatures over each organ of the brain. He exhibited to the meeting several instruments which he had progressively contrived and employed, and he pointed out the defects of many of them, in order to prevent others wasting time and money in going over the same costly ground that he had found unfruitful. He exemplified the deficiency of the common calliper, and shewed that it was not practicable by its means to obtain the distance of any medial organ from a line passing through the orifices of the ears, and consequently it was not sufficiently exact for ascertaining the proportionate development of the superior, anterior, and posterior portions of the head, without a knowledge of which proportions no sound phrenological judgment could be formed. Mr Hawkins exhibited as his last and best production, being both effective and cheap, a craniometer consisting of a metal tube about six inches long, and a quarter of an inch inner diameter, to be laid horizontally across the top of the head; into each end of which horizontal tube, a tube three inches long slides, and against the end of each of the sliding tubes is firmly fixed a vertical tube two inches long, open at both ends, and about an eighth of an inch internal diameter. Through the vertical tubes two wires slide, each seven inches long, having about an inch of the lower end bent at right angles to the remaining six inches of its length, the shorter of the two arms of the wire being terminated by an ivory ball a quarter of an inch in diameter. In order to keep the two balls in a line pointing towards each other, a groove is cut along the back of each sliding wire, and an elastic tongue is formed in the vertical tube to press into the groove, and serve the double purpose of a guide to prevent the wire turning around, and of a spring to allow of easy sliding motion without liability of slipping with its own weight. In using this instrument for taking the altitude of the head above the line passing through the orifices of the ears, the ivory balls are placed in the ears, and the horizontal tubes slid down upon the vertical wires until the middle part touches the top of the head. The balls are then taken out of the ears, which the sliding of the horizontal tubes allows of being easily done, the instrument is laid down on a table, and the distance from the horizontal tube to the centres of the balls measured with a rule, or the wires may be graduated to shew the measurement on inspection. By a similar application to the front or back of the head, the respective distances from the line may be obtained. Mr Hawkins did not recommend this craniometer as a substitute for the common calliper for taking the distances

of any two accessible points, for which purpose the common calliper is rather more convenient.

“ For taking curvatures he shewed a wire of pure grain tin, which is so pliable that it takes the form of any curve over which it is pressed, and by reason of its freedom from elasticity retains the figure with sufficient firmness to be taken off the head and laid down on paper, where it may be held by laying a stick across the two ends, while a pencil is passed around inside the wire to delineate the curvature of the part measured.

“ He also exhibited a very simple instrument, by means of which curves may be taken upon paper immediately from a skull or cast held down upon the paper. This instrument consists of a circular piece or disc of wood about three-inches diameter, and an inch thick in the middle, but thinned off to half an inch at the circumference, one side being flat. Near the circumference a metal tube, one inch long, and one-sixth of an inch diameter, is fixed perpendicular to and even with the flat side of the disc, but projecting from the uneven side. Through this tube a short bit of pencil slides freely, and is pressed with force enough to mark on paper by a spiral spring placed tightly on the tube and bearing on the end of the pencil. From the middle of the uneven side of the disc arises, perpendicular to the flat side, a cylindrical stem five inches long and five-eighths of an inch diameter, having a groove along its whole length on the side towards the pencil; upon this stem a spring-socket slides, carrying an arm projecting at right angles from the stem, the extremity of which arm is formed into a knife-edge figure; this edge is always in a line with the axis of the pencil, being guided by a tongue sliding in the longitudinal groove of the stem. It is obvious that the knife-edge end of the arm being passed around any part of a skull or cast held down upon paper, while the flat face of the disc is passed over the surface of the paper, the pencil will mark the outline passed over by the tracing arm.

“ Mr Hawkins exhibited diagrams of two heads of active-minded persons which he had measured at different periods, from which it was seen that one head had grown three-eighths of an inch in height in 24 years, between the ages of 30 and 54, and the same head had acquired an eighth of an inch of additional height in 15 years from the ages of 54 to 69. The other head had gained near a quarter of an inch in height in 12 years, from the ages of 55 to 67. Mr Hawkins concluded with offering to communicate gratuitously, the results of his experience, to any young man who would undertake the manufacture of these instruments for sale.

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The "Almanac" contains an amount of matter which, when compared with its low price, must render a wide circulation indispensable to save the publishers from loss. Such a circulation we trust it will have. It is very well got up, if we except the cuts, some of which are so hideous, that, for the credit of the work, we wish they had been omitted: *vide* the portrait of President Harrison! But experience will help the editor to avoid, in future publications, the faults which can hardly be kept clear of in a first attempt like the present.

"Mr Deville recommended a flat tin strap about three-eighths of an inch wide, and the twentieth of an inch thick, as preferable to the wire."

There is a diagram of the craniometer in the Almanac, to which we refer. We were present when Mr Hawkins, who is an old and zealous phrenologist, exhibited this instrument to the Association, when it was much approved of. The craniometer invented about eighteen years ago by Mr Robert Ellis of Edinburgh, and which is figured in the early editions of Mr Combe's Elements of Phrenology, seems to us a more simple instrument for obtaining the same results. In practice, however, it has not been found of much utility.

Brief biographical memoirs follow, with engravings of portraits of Dr Gall, Dr Spurzheim, Burritt the learned blacksmith, and Mr Harrison the late American President.

The publication also chronicles phrenological lectures, societies, and museums; and appends a regular yearly almanac, differing, as far as we can see, from other almanacs, only in this, that it places the births and deaths of Gall and Spurzheim, with a few celebrated scientific and literary men, such as Bacon, Byron, Canning, &c., along with those of the royal family and the saints, opposite to their dates.

The following case, as it is short, we quote entire: it is headed, "*Death from Excessive Exercise of Imitation*," and is extracted from a private letter, dated London, 27th October 1841, from Mr C. Donovan to the Editor.—"I lately took an interesting cast of Mr Nightingale, a very remarkable imitator, who exhibited his imitations of well-known actors during the two last seasons, at the Adelphi Theatre, Strand. He called on me about a month ago to have his cast taken, but as he did not appear to be in a fit state of health, I begged him to wait a few days. I took his cast, or rather got my man to take it, I assisting him, on Friday evening last, *in his coffin*. He died of brain fever. With him imitation was a passion. He was always at it. He would go with a party to sup after theatre hours, and keep on imitating till quite exhausted. When he rose in the morning he began imitating. This work, with its collaterals, killed him. He was a miniature painter also, and had been bred an engraver. His head is a fine one. Imitation **VERY LARGE**. His age was thirty. As a son and brother he was most amiable and affectionate."

Now we would humbly suggest to the Editor that the insertion of such cases as this, *without comment*, as if they required none, and were intended to be believed as they stand, will seriously injure the credit of the "*Almanac*," and tend to revive the trade of the antiphrenological scoffer on a fresh

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III. *The Education of the Lower Classes.* A Sermon. By HENRY PARR HAMILTON, M.A., F.R.S., Rector of Wath, and late Fellow of Trinity College, Cambridge. Second Edition. London : Rivingtons, 1841.

There is neither novelty nor originality in the views here developed ; but it is exceedingly gratifying to find a clergyman of the Church of England so earnest in advocating the establishment of a rational and comprehensive system of intellectual, moral, and religious education.

"It is with sorrow and shame," he remarks, "we are constrained to say, that, even in our own days, the friends of education had, for many years, an arduous conflict to maintain with a numerous and powerful body, who held the monstrous doctrine, that, by educating the lower orders, we should render them discontented with their station, and unfit them for the discharge of the duties which belong to their humble sphere. Experience has proved the utter groundlessness of an opinion which seems to have originated in the prevalent error of mistaking mere instruction for education. I confidently appeal to yourselves, my brethren, which of the two is the more likely to be dissatisfied with his lot in life—the uneducated man, who feels, without comprehending, his inferiority in the social scale ; or the educated man, whose cultivated mind enables him to understand the necessary subordination of ranks in society, and the wants and sympathies which link all its parts closely together ? Again, I ask you, which of these men may be expected to execute with the greater fidelity the duties of his station—he who is utterly unacquainted with the religious and moral grounds of duty, or he who has been diligently trained in them, and who has been taught, from his youth up, that one of the fundamental precepts of Christianity is, to do our duty in that state of life to which it hath pleased God to call us ?"

Ignorance, he maintains, creates an incapacity for receiving religious truth, and a capacity for imbibing religious error. To nations, no less than to individuals, it has ever been the fruitful parent of vice and misery. "In truth, nothing can be more dangerous to a state than that the mass of the population should be ignorant ; while, on the contrary, an educated and a virtuous people is the firmest support of a good government." Holland is referred to as an example. "All persons who have recently visited that country, concur in representing the population as eminently distinguished for their order, sobriety, industry, loyalty, morality, and religious feeling ; effects which the people themselves attribute, with grateful una-

nimity, to the admirable education which the State has provided for them."

After noticing the degraded and alarming condition of a large portion of the labouring class in England, Mr Hamilton observes, that the wisest and most liberal policy will contribute but little towards their permanent well-being, so long as their education, in the largest sense of the term, is not made the first of national questions. "And if we blindly and obstinately put off from year to year this most essential reform, the reform of the mind and heart of the nation, the disastrous consequences which will inevitably ensue cannot but be regarded as a righteous judgment of Heaven upon us for our unpardonable apathy in a matter of such vital moment."

The necessity of training, instructing, and sufficiently remunerating teachers, is dwelt upon with due earnestness. As to the mode of carrying on the business of schools, Mr Hamilton is of opinion that the employment of monitors, though well calculated to facilitate the repetition of lessons, and to excite a spirit of alacrity and emulation—thus enabling one master to control and instruct a large number of boys without the aid of salaried assistants—fails in promoting the great end of education, the discipline of the moral and religious feelings, and the development of the intellectual powers. With respect to *what* should be taught, he argues for something beyond mere reading and writing: "We must endeavour to furnish the pupils with sufficient knowledge to understand and to value what they read; and thus, by multiplying their mental resources, and by inspiring them with a taste for more elevated pursuits, to check and eradicate their propensity to the grosser pleasures of sense." It must, he adds, be a still more important aim to inculcate those religious and moral principles which ought to regulate their conduct. Vocal music he justly considers to be highly useful as a means of moral improvement; and he would rejoice to see also natural theology introduced into every system of primary education. No department of knowledge, says he, is more useful and interesting than this, or better fitted to serve as a link connecting secular with religious instruction. "The fundamental principles of natural history, and the leading facts of natural philosophy, are admirably calculated to be made the vehicles of religious sentiment, and of religious instruction. In unfolding to a child the structure of a plant or of an animal, or in explaining to him the ordinary phenomena of nature, how happy an opportunity presents itself of impressing his mind with the wisdom, the goodness, and the power of his Creator!"

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Our readers, we trust, will be not less pleased than ourselves to observe such liberal views emanating from a pulpit of the Establishment.

IV. INTELLIGENCE, &c.

Edinburgh.—On 13th December, the following gentlemen were elected office-bearers of the Phrenological Society for the ensuing year:—Sir George Stuart Mackenzie, Bart., President; James Simpson, Andrew Combe, M.D., Peter Couper, and James Tod, Vice-Presidents; Patrick Neill, LL.D., Francis Farquharson, M.D., Charles Maclaren, Andrew Dun, George Monro, and George Cox, Councillors; Robert Cox, Secretary and Curator of Museum.

Aberdeen.—The progress of Phrenology here is steady and satisfactory. At the ordinary meetings of the Society, essays on the following subjects have been read since the date of last report:—Effects of Compression of the Cranium, as practised by Savage Tribes, by Professor Gregory, M.D., of King's College.—Objections to Phrenology considered; first paper, Human Responsibility; second paper, Materialism; third paper, Objections professing to be founded on Anatomical Considerations; by Professor Gregory.—Education of the Juvenile Criminals and Paupers of this City, by Mr James Straton.—The Social System of Mr Owen, by Mr Esdaile.—The Effects of Education on the Condition of the Working Classes, by Mr Straton.—Connexion between Science and Theology, by Mr Esdaile.—Use of Knowledge, in so far as it invests Man with Foreknowledge and Control over the Laws of Nature, by Mr Straton.—Religious Toleration, by Mr Clerihew.

A class in charge of the Secretary meets every Monday evening for instruction in the elementary principles of Phrenology. Since the 1st of October, twenty new members have been admitted; and several valuable additions have been made to the library and museum.

At the Annual General Meeting on the 7th inst., the funds were found to be in a flourishing state; and the following gentlemen were elected to conduct the affairs of the Society during the ensuing year:—George Combe, Esq., Honorary President; Professor Gregory, George Maitland, Presidents; James Straton, Secretary; Alexander Keith jun., Treasurer; Thomas Kirby, Librarian; John Stirling, James Robson, George Petrie, James Johnston, John Finlason, Members of Committee.—Dec. 1841.

Warrington.—The Annual Meeting of the Warrington Phrenological Society was held on November 5. 1841, when the report of the last session was read, and the following gentlemen were elected to serve as officers for the ensuing year:—President, Mr W. Robson; Vice-President, Mr Peter Rylands; Treasurer, Mr J. G. MacMinnies; Corresponding Secretary, Mr Grierson, surgeon; Honorary Secretary and Curator, Mr T. G. Rylands; other Members of the Council, Mr John Rylands jun., Rev. J. Molyneux, and Mr Hunt, surgeon. The museum has been increased during the past year, and the additions to the library consist of works by Professor Caldwell, Gall, Solby, Goyder, Combe, Scott, &c. Donations of books have been received from Robert Cox, Esq., Corr. Mem., and from the Rev. D. G. Goyder of Glasgow.

Dumfries.—*To the Editor.*—Sir,—I have much pleasure in calling your attention to the following fact, which, if it does not prove that Phrenology, as a science, is decidedly progressing, at least shews that there is an interest abroad respecting it. At our late Exhibition, got up by the Mechanics' Institute of the burgh, we had a room fitted up exclusively for phrenological busts, casts, and preparations illustrative of the science. It

was, at first, thought that the crania, &c., would not present a very attractive appearance, and would be viewed by many persons, especially females, with dislike. Accordingly, the room devoted to that purpose was situated at the extremity of a long gallery, and in a situation which it was not necessary to pass in order to get at the other rooms. But, contrary to the opinion of many, this room attracted a great majority of visitors, who appeared deeply interested with different appearances of development, as exhibited in the casts. On one or two occasions, on which I pointed out to them the leading principles of the science, I was listened to with the greatest attention. The remarks made by many of the visitors, shewed an acquaintance with the subject which could scarcely have been looked for. I am certain that not less than 5000 persons visited this department of the Exhibition.—I am, &c., W. C. ATKEN, Acting Secretary to the Exhibition. Dumfries, Dec. 4. 1841.

London.—“The first meeting of the Phrenological Society for the session was held yesterday evening, in the rooms of the Society at Exeter Hall, Dr Elliotson, F.R.S., President, in the chair. Judging from the attendance, which did not exceed ten persons, and the matters discussed, this science now attracts very little attention or interest in this country. The President gave an account of some interesting phrenological collections in Paris, and also at Milan and Pavia, where, as in other parts of Italy, the society is making great progress.”—*Morning Post*, 2d Nov. 1841.

We are informed by Mr Richard Redburn, Honorary Secretary of the Social Institution in John Street, Tottenham Court Road, that the members of it have for some time been much engaged in the study of Phrenology. He says—“Many of the admirers of Mr Owen agree with him as far as he has gone; but there are some who, like myself, do not think he has gone quite far enough, in not laying more stress upon the necessity of understanding the nature and functions of the human brain, which, we must all agree, is acted on by education and external circumstances. Such being the case, a class for the study of the science of Mind as discovered by Dr Gall, has been instituted in the Social Hall, John Street, and has now (October 1841) existed for twelve months.” At the outset, the novelty of the subject, and the supposed ease with which it could be mastered, made the class extremely attractive: during the first quarter, it contained sixty members, each contributing 1s. 6d. for the purchase of books and casts. The lowness of the quarterly subscription, rendered necessary by the circumstances of the members (who are mostly mechanics), has prevented the purchase of a sufficient supply of books. At each weekly meeting an essay is read; in the discussion which generally follows, the members communicate whatever information they happen to possess on the subject under consideration; and if any thing appears unintelligible or irreconcilable to nature, recourse is had to observation and books for a solution of the difficulty. In the second quarter the class consisted of forty members, who, in consequence of the diminution of the number, had now more frequent access to the books. The meetings were discontinued during the three fine months of summer, but between thirty and forty members continued their subscriptions, and made good use of the books during that space. An addition to the library was meantime procured; and many were prepared to read essays when the meetings were resumed in September. The Secretary's opening Address was listened to by above one hundred persons; and when he wrote us, the members of the class amounted to sixty-two, a considerable number of books had been collected, and there were some funds on hand. “It has been my endeavour,” he judiciously adds, “to impress upon the members the necessity of getting

a good theoretical knowledge of the science first; for I think we ought to have considerable information upon the subject before we give a decided opinion upon character, or go about feeling heads; and that we should follow as nearly as possible Mr Combe's advice, given in his Address to the Phrenological Association last year." Many of the members, conceiving that they have now acquired sufficient theoretical knowledge to enable them to receive practical instruction with advantage, are desirous to engage a teacher; but the difficulty in the way of realizing this wish had not been overcome at the date of our correspondent's letter. More books, also, are felt to be desirable. "There is," continues our correspondent, "an under-current working, which no one but those who watch the proceedings of the people can have any idea of, and even they not to the full extent; for in all probability you were not aware that such a class was in existence in such an Institution. I can add, that it is not only in this Institution, but in some others of the same society, that the study of Phrenology is pursued; and although we have been joked at, and called fortune-tellers, &c., the scorners find it very difficult to cope with us in fair argument, and many are now beginning to think more seriously of that which so intimately concerns them."—We are gratified by this illustration of how much may be done upon small means by the working classes, in acquiring useful information. The Socialists are loudly accused of holding doctrines at variance with sound views of human nature. What amount of truth there is in the charge, we have not qualified ourselves by inquiry to judge; but if there is a good foundation for it, we know of no better means of dispelling their delusions than to encourage among them the study of Phrenology. The great arrangements of society rest on the permanent basis of the human faculties; and no reasonable person acquainted with the innate and radically unalterable feelings and tendencies of man, will think it wisdom to oppose institutions which necessarily result from their action.

Wolverhampton.—At a meeting of the Literary and Philosophical Society on 12th October, Dr Bell read a paper in support of the doctrine of materialism. His arguments are reported in the *Wolverhampton Chronicle*, but we have not room for their insertion here. The facts adduced as evidence, seem to have been of a kind familiar to phrenological immaterialists, who, therefore, would think them of no force if presented. At the immediately following meeting, Mr W. R. Lowe read a paper on Education, in which he made good use of the principles of Phrenology.

Paris.—"An interesting discussion took place in the sitting of the Paris Academy of Medicine on the 26th Oct., on the report of a commission relative to some experiments in Phrenology made by Dr Felix Voisin, one of the royal physicians, and who is known to the English public by his lectures in London about three years ago. Dr Voisin is now the greatest authority on Phrenology in France, or perhaps in Europe. He was President of the Phrenological Society of Paris after Broussais, and has published some valuable works on the subject. This gentleman had visited the juvenile Penitentiary of Paris, and examined the heads of 400 prisoners. As he examined them, he put those whom he called *bien ou mal nés* to the right or the left, according to his view of their mental organization; and divided them into four categories, viz. two extremes for the best and worst, and two for what he calls *les conditions moyennes*; and the director of the prison, being subsequently called upon to verify or controvert his results from his knowledge of the individuals, confirmed the correctness of Dr Voisin's classification. Dr Voisin concluded from this examination, and from the results of all his preceding experiments—first, that the greatest criminals are found in the lower classes of society; second, that two-thirds of the

criminals brought to justice have a defective organization. The commission, in their report to the Academy, expressed their conviction of the truth of Dr Voisin's conclusions, and proposed that his name should be placed upon the list of candidates for the first vacant chair of the Academy. Some of the members having asked if the faces of the persons examined had been seen by Dr Voisin, and it being admitted that they had, an objection was taken that his conclusions as regarded Phrenology amounted to nothing, and there arose a sharp discussion as to whether Gall and Spurzheim had or had not asserted the existence of Phrenology as a science without reference to physiognomy. Some of the distinguished men present declared unhesitatingly that Phrenology, as regards the location of organs, is a humbug; other equally distinguished men sided in opinion with Dr Voisin, that the science is a true one. The discussion was adjourned till the next sitting."—*Newspaper paragraph, Nov. 1841.*

We observe, that at the late trial of Quenisset for conspiring against the life of the Duke of Orleans, he got into a passion, and began to rail violently against his accomplices. "The President," says the report of the trial, "here told Quenisset not to abuse his co-accused; but Quenisset continued: the peers before him, he said, were many of them phrenologists, and must be able to see that those about him had visages like Marat and Robespierre."

Dr Robertson's Legacy.—We formerly announced that the late Dr James Robertson (a native of Hamilton, but who for upwards of twenty five years resided in Paris) had bequeathed the residue of his property to the Phrenological Society of Edinburgh. The amount of that residue, the Society have reason to think, is about L.15,000. Dr R. was a zealous adherent of Phrenology, and we have seen two letters which he wrote to Sir George Mackenzie about his intention to leave his property for its promotion and diffusion. In the first of these, dated 2d March 1840, he says—"I have been saving or sparing money for years, with a view to do some good to society with it at my death; but every way I have turned my attention I have thought I saw reasons to apprehend misapplication, embezzlement, or job. Lately, I had decided to leave my property to the London University College, to found a prize on the psychological physiology of the brain. I sent to England to get their laws, instead of which I got a table of the classes, &c.; and when I came to Philosophy of Mind and Logic, with Dr Hoppus declaring one great object is to train the student to reflect with ease on the phenomena of his own consciousness, I plainly saw that cock could never fight: to put money into such hands would not only be useless; it would be furnishing the enemy with the sinews of war. I have been thinking I would offer the University College a thousand pounds or more if it would establish a chair and appoint a professor of Phrenology. If a chair were established, it might lead me to put into their hands some 12 or 14,000 pounds more to found prizes or encourage physiological labour." In his second letter, which is dated 9th March 1840, he suggests that if any communication should be made to the council of the London University on the subject, the word Phrenology would perhaps be so unpalatable that a less offensive term might be used—"say, for example, Chair of Psychophysiology or Psychological Physiology, or investigation of the relations between the mind and the brain and its instruments; but still it must be effectively phrenological." Ultimately, he resolved to leave his property, under the deduction of a few legacies of no great amount, to the disposal of the Phrenological Society. His will to that effect was duly and formally executed on 24th August 1840, the month before his death. Dr Robert Verity, the executor, for reasons best known to himself, and about which

we shall say nothing at the present stage of the proceedings, refused to pay the legacy, on the groundless plea that the Society had ceased to exist; so that they have been obliged to resort to legal measures in order to enforce the execution of the will. A suit was commenced in the Second Chamber of the Tribunal at Paris; but the competence of the French Courts to try the cause was denied by the executor, who, on 20th November, succeeded in obtaining a judgment that "the Court declares itself incompetent, sends the cause and the parties before the Judges whose duty it is to take cognizance thereof, and condemns the plaintiffs in expenses." The grounds accompanying this decision are—"That every succession opens in the place of the domicile of the deceased—That Dr Robertson was by origin a foreigner—That he never applied for authority to establish his domicile in France—That there is no indication of his having left his country without the intention to return; on the contrary, affection for his native country and the disposition to return are evident in the very terms of his will—That he thus preserved his character as a foreigner and his original domicile, and ought to be considered as having had in France only a simple residence, which cannot be confounded with the domicile which regulates the chance of the opening of successions—That to suppose the domicile in France, the competence would be fundamental (*fondative*), the dispute being between two foreigners—That in this case it would still be necessary to send the fundamental questions before the foreign court, as being better qualified to decide them, and, in particular, to pronounce upon the existence or non-existence of the Society instituted the universal legatee; which the French courts could not do except on the faith of testimony more or less contestable." And even the Society's application for an order on the executor to consign the money was refused, on the ground that this provisional measure was inseparably connected with the fundamental questions. Such is the manner in which Dr Robertson's intentions have as yet been fulfilled. At present we merely add, that the Society are determined to leave untried no available means to vindicate their rights, the validity of which, it ought to be mentioned, is supported by the decided opinions of John Hope, Esq., lately Dean of the Faculty of Advocates, and now, as Lord Justice Clerk, President of the Second Division of the Supreme Civil Court in Scotland,—and Alexander Wood, Esq., the present Dean of Faculty. The opinions of these eminent lawyers are founded on a full exposition of every pertinent circumstance of the Society's affairs; so that confident expectations are entertained that the attempt to enforce the execution of Dr Robertson's philanthropic intentions will ultimately be successful.

Death of Mr Henry Clarke.—Died on Friday the 10th December 1841, having just completed his 40th year, Henry Clarke, Member of the Royal College of Surgeons of London, a zealous and well-informed phrenologist.

He entered the medical profession at Bicester in Oxfordshire, and, after completing his studies at the then united hospitals of St Thomas and Guy, settled as a general practitioner in Lamb's Conduit Street, London, in August 1827.

Early impressed with the truth of the science, and conscious of its vast importance to the medical profession and to society, he avowed his unqualified conviction on all fitting occasions; and, from his engaging manners and extensive information, greatly assisted in diffusing a knowledge of the real nature of the system of Gall and Spurzheim among influential and scientific men in the metropolis.

He was one of the original and most active members of a small society, now extinct (formed, with one exception, by medical men), who for seve-

ral years met once a-week, at their private residences, to study phrenology, and, more particularly, to investigate the structure of the brain, and to ascertain the shape and disposition of the convolutions which compose each of the organs admitted by Spurzheim. During this period, he discovered and made known a method of drying and preserving the human brain entire; one which he possessed had been so preserved more than eight years. On the first meeting of the Phrenological Association in London, he became a member, although he had been obliged to relinquish his practice in London, and was then settled with broken health at Walton-on-Thames. Without being engaged in lecturing, writing, or manipulating *pro mercede*, he zealously cultivated the discovery of Gall, and powerfully contributed, by means of judicious conversational demonstrations, and the aid of a well-chosen private collection of casts and brains, to remove those prepossessions against Phrenology which pass current in society, and which are owing partly to misapprehension, but chiefly to the trading spirit and incompetency of some of its self-styled professors.—*Correspondent.*

Lectures on Phrenology.—On 9th December, Mr M. B. Sampson completed a course of five lectures on Phrenology, delivered in the town-hall of *Chesham*, in Buckinghamshire, at the request of the members of the Lyceum of that town. They were well attended, and a wish was expressed that the subject should be farther expounded in another course.

The following courses of lectures have been delivered by Mr D. G. Goyder of Glasgow:—In the month of October, seven lectures at the Phrenological Society's Hall, *Glasgow*, to 80 ladies and gentlemen.—October and November, at the Philosophical Society's Hall, *Huddersfield*, seven lectures to 470 ladies and gentlemen. At the Calton and Mile-End Mechanics' Institution, *Glasgow*, seven lectures during the months of November and December; numbers varying from 100 to 200.

Mr Donovan of London has favoured us with the following record of his recent lectures:—“At *Ipswich*, on 23d, 24th, 25th November; attendance, members included, over 500 each evening; many of ‘The Society of Friends’ present; the receipts from non-subscribers, at 1s. each, amounted to more than the *entire expenses* by nearly L.1.—At *Bury*, 30th November, 1st and 2d December; attendance not very numerous, but highly respectable; Drs Probert and Cooke presided. The morning after the conclusion of this course, I was waited upon by two gentlemen, one of whom addressed me in the following strain:—‘My name is Dalton, this is my brother; we are both surgeons and in good practice in this our native town; we attended your lectures fully impressed, at first, with the general notion that Phrenology was only an ingenious crotchet, totally unsupported by physiological evidence; but we had not given the subject anything like *attention*. We now come to pay our respects to you, to express our entire concurrence in the views so clearly explained by you, and to have our heads examined. For my part,’ said the speaker, Mr John Dalton, ‘I felt as if I had been asleep these forty years.’—At *Woodbridge*, 6th, 7th, and 8th December; attendance (particularly at the last two lectures, the first night being very wet) numerous and highly respectable; two clergymen of the Established Church and many medical men. After the first lecture, I was visited by Dr Lynn, the senior M.D. of the town; the well-known and ardent phrenologist, Mr Jefferson, surgeon of Framlingham, was present each night, having to come and return 12 miles. On Thursday next I proceed to *Ipswich*, to commence a week's teaching to a class of the Institution, receiving L.10. One lecture for the benefit of a charity will precede this course of instructions in the art of manipulating, &c. This lecture will have for its subject the common pre-

judices against phrenology, with some notice of the opposition raised by the editor of an Ipswich paper. In January I am engaged by the societies at *Thetford* and *Norwich*. On Tuesday next I give an introductory lecture at *Tottenham*; in March a course of three at *Croydon*. Early in November, having first given an introductory lecture at the Western Literary and Scientific Institution, Leicester Square, I was, by the unanimous vote of the Committee, appointed Professor to the Institution, and commenced, on the following Monday, to instruct a class of 21. I omitted to state, that, in November, I delivered a course of three lectures at *Colchester*, by invitation of the gentry of that town; which was well attended. Wherever I have gone, I have found the medical men most anxious to forward the object in view, and *proud to be ranked as phrenologists.*"

On 22d October, a lecture was delivered by Mr W. R. Lowe at the Mechanics' Institution, *Ironbridge*, in Shropshire. It is largely reported in the *Shrewsbury News* of 30th October. The reporter has added the remark, that "if the head of the reader be like that of the writer of this report, and that of Socrates, which measured only twenty inches round—if Mr Lowe's system be true, he may be assured that he will never become a great man." How did this wiseacre ascertain the girth of the head of Socrates? and from what premises does it follow that a head twenty inches in circumference cannot be that of a great man? Does a band applied horizontally round the head indicate the size of *all* the regions of the brain from which "greatness" may spring?

Mr J. Q. Rumball has recently been lecturing in the south-west of England. In August he gave a course at the *Wadebridge* Institution, and during his visits to *Plymouth* has occasionally delivered lectures there. His last was given in the Mechanics' Institution on 19th October. We learn from the *Devonport Independent*, that immediately after the lecture, a handsome silver snuff-box was presented to Mr Rumball, by Master Bennetts, son of J. Bennetts, Esq. of Woodlands, Penryn, in the name of himself and fellow pupils in the establishment of Mr T. M. Burt, Windsor-Terrace, as a mark of their respect and regard for the kind manner in which he had addressed them, at their own request, in the school-room of the establishment, on the previous Friday, on Phrenology. The token was presented in a brief but neat and suitable address. Mr Rumball, it is added, "acknowledged the gift in a very animated and pleasing speech, explaining the circumstances which had led to the presentation of this gratifying but not altogether unexpected token of kindness. He stated that he had addressed the youths at their own desire, intending only a short explanation of the subject, but to his surprise they had listened to him with unflagging attention for two hours, and he understood that they had spontaneously raised a subscription among themselves for the purpose of presenting him this mark of their regard. He adverted to the necessity of the rising generation not being behind the rest of the world in information on a subject so generally engaging public attention. If they were deficient in it they would find that others would possess a knowledge of their minds, that they did not possess of theirs."

The only other recent lectures which have come to our knowledge are, a course in *Belfast* by Mr Wilson, delivered in November; another by Mr Graham, member of the Phrenological Society of Glasgow, at *Kirkcubbin* in Dumfriesshire; and a lecture by Mr S. Logan, on 20th October, before the Spicer-Street Mutual Instruction Society, London.

M. De la Bourdonnais, "the first chess-player in the world."—"M. de la Bourdonnais is of a noble family, being grandson to that governor of the Mauritius immortalized by St Pierre in 'Paul and Virginia.' De la B. is

now about forty-five years of age. He was educated in the College of Henri IV., but has never followed any profession except chess, which he took up as a passion about five-and-twenty years back. His frame is large and square, the head presenting a fine study for a phrenologist, bearing the organs of calculation enormously developed. Solid and massive, the head of La Bourdonnais is a true Napoleon front; carved out of marble, and placed upon shoulders of granite, like those of Ajax Telamon. That eye so piercing looks through and through the board, so as to convey the feeling that La Bourdonnais could really see well in the dark, which hypothesis accounts for his playing so beautifully blindfold. From the east and the west, from the north and the south, have players come to kneel at the footstool of the monarch. They present themselves under smiling pretences, but nerved, nevertheless, to have a pluck at his diadem. Hitherto all have tried in vain; none having encountered La Bourdonnais, for fifteen years, to whom he could not give the pawn, with the single exception of the late Alex. McDonnell. No passing events can shake the attention of La Bourdonnais when at chess. He concocts jests and mates in the same crucible. *Une petite position* is what he aims at from the beginning. Let him once attain that and be sure he'll hold his own. The clearness with which he foresees consequences, through a long vista of checks and changes, is truly admirable." [This account of La Bourdonnais is abridged from an article in Fraser's Magazine for December 1840. The capacity for playing "blindfold," and foreseeing "consequences" such as those stated, doubtless depends on large knowing faculties, which retain or imagine images not placed before the eyes. The particular value of the organ of calculation (Number) in chess-playing, is not altogether apparent, though its being so prominent a characteristic in the heads of noted chess-players seems to imply some close relation betwixt the organ and the talent of a Deschappelles or Bourdonnais.—H. O. W.]

The Quarterly Review for September, in criticising Mr Combe's Notes on the United States, takes occasion to sneer at Phrenology; but none of its witticisms require particular notice. We merely give the following extract as a specimen of the reviewer's candour. "In the same Address," he observes, "Mr Combe says to the Americans:—'One great obstacle to your moral, religious, and intellectual progress, appears to me to be the influence which the *history*, institutions, manners, habits, and opinions of Europe are still exercising over the minds of your people.' (Vol. iii. p. 430.) This looks as if our professor had no great respect for *experience* as a teacher of wisdom—since, if the Americans can derive no good from the study of the 'history of Europe,' it is pretty clear that they can learn nothing from any civil or political history whatever, always excepting that of their own republic, now of about fifty years' standing. We are at a loss, however, to reconcile this contempt for the aggregate experience of mankind with the reverence which Mr Combe expresses for the experience of individual men." And again: "We do not understand how the American people, old or young, are to understand Smith, Ricardo, and M'Culloch, and 'decide on them' in such a manner as to avoid the risk of 'awful experiments'—unless they have studied the *history* as well as the *opinions* of Europe. It is from that history that all our political economists pretend at least to draw the facts on which they defend their several theories, and we are obliged to confess that we often do not understand the theories, even with the advantage of not condemning the history." These are good remarks, but with what justice directed against Mr Combe, will appear from the following sentence, *which immediately follows the words extracted by the reviewer*:—"STUDY THESE, in order to imbibe their wisdom and adopt their refinement; but avoid the errors

which they exhibit, and shun them as guides in your religious and political progress." The above is one of the coolest perversions that we remember to have seen. The critic has not a word of praise to bestow on any part of Mr Combe's work.

Employment of Discharged Prisoners.—The magistrates and clergy of Surrey have established an institution, to be supported by voluntary contributions, the object of which is to furnish the means of existence to those who, on their discharge from prison, are found to be without friends, and unable to procure employment—such persons being frequently led, almost by necessity, to seek their maintenance in their former criminal pursuits. They are maintained, employed, and educated, until, by a continued course of good conduct, the committee feel justified in recommending them to permanent situations in trade or service.—*Newspaper paragraph, Nov. 1841.*

Deficiency of Arithmetical Power in the American Indians.—"One of the most remarkable intellectual defects of the Indians is a great difficulty in comprehending anything that belongs to numerical relations. Humboldt states that he never saw a man who might not be made to say that he was eighteen or sixty years of age. Wafer made the same remark in reference to the Indians of Darien; and Mr Schoolcraft, the United States' Indian agent, assures me that this deficiency is a cause of most of the misunderstandings in respect to treaties entered into by our government and the native tribes. The latter sell their lands for a sum of money without having any conception of the amount; so that if it be a thousand dollars or a million, few of them comprehend the difference until the treaty is signed and the money comes to be divided. Each man is then, for the first time, made acquainted with his own interest in the transaction, and disappointment and murmurs invariably ensue."—*Morton's Crania Americana, p. 83.*

"The experience of most of our readers will enable them to remember many excellent persons of good average vigorous intellect and judgment in all other respects, and yet who are strangely deficient in this faculty of understanding or perceiving the relations of numbers, and who cannot, by any effort of their own, or any aid from others, be made to form distinct ideas of numerical magnitudes. Conversely, there are seen individuals who have remarkable calculating powers, yet whose judgment is not remarkable in any other respect, either in the way of comprehensiveness or energy."—*Edin. Med. and Surg. Jour. Oct. 1840, p. 456.*

Natural Excellence of the Human Faculties.—"The affections and passions," says Dr Samuel Clarke, "are not in themselves evil (as some of the ancient philosophers vainly imagined), but were implanted in us by the wise Author of all things for excellent ends and very useful purposes: that we, whose mixed nature of body and spirit would otherwise have made us too remiss in pursuing the ends to which bare abstract reason directed us, might, by the affections and passions, under the regulation of reason, and subservient to it, i. e. by reasonable fears and hopes, by love and hatred, by anger or complacency, be pushed on and excited to be more earnest and vigorous, more constant and diligent, in all those actions of life which reason directs, and the affections execute."—*Sermon preached before the Queen, 7th Jan. 1711; Works, ii. 430.*

Effects of Tobacco.—In many cases of religious melancholy, where long prayers are ineffectual, great relief may often be expected from a *short pipe*. The value of tobacco at lyk-wakes is well known in every part of the United Kingdom. It blunts the edge of grief, and, by inducing kindly feelings, causes the neighbours and friends of the deceased to forget his

faults and to enlarge upon his good qualities.—*Dr H. W. Cleland on the History and Properties of Tobacco.*

Firmness a Characteristic of the Jews.—It is worthy of remark, that this characteristic of perseverance that distinguished Moses is the characteristic which in all ages distinguished, and which still distinguishes, the Jews. The Greeks had far more grace, and a profounder and more refined sense of the beautiful. The Romans had more of that vehement courage, which is the most useful instrument of an inordinate ambition. But all nations, ancient or modern, yield to the Jews in the fixedness of an indomitable purpose. What other people but they could have retained their nationality, after a banishment of two thousand years from the land of their fathers? What people but they could have retained the same religious ideas, the same religious observances, the same religious expectations, in spite of change, and persecution, and social disorganisation, and the overthrow of empires?—*Rev. W. Maccall, in the Christian Pioneer.*

A Calculating Boy.—Among the many boys employed for the different purposes of calculation on the Ordnance Survey of Ireland, there is at present one named Alexander Gwin, only eight years old, and a native of Derry, whose abilities, at his early age, are truly surprising. He has got by rote the fractional logarithms from 1 to 1000, which he will repeat in regular rotation, or otherwise, as the interrogator may please to put the questions. It is certainly astonishing to think so tender a mind can retain, with such tenacity and correctness, seven figures of an answer (according to their different variations) for 1000 numbers. His rapidity and correctness in the various calculations of trigonometrical distances, triangles, &c., &c., are amazingly beyond anything we have ever witnessed. He can, in less than one minute, make a return in acres, roods, perches, &c., of any quantity of land, by giving him the surveyor's chained distances; while the greatest arithmetician, with all his knowledge, will take nearly an hour to do the same, and not be certain of truth in the end.—*Newspaper paragraph, Oct. 1841.*

Influence of the Weather on Insanity.—The following is given as a proof of the influence of the temperature of the air on mental alienation. On analysing 16,867 observations, furnished by the returns from the lunatic Asylums of Charenton, Bicêtre, the Salpêtrière, the hospital at Turin, and that at St Yon, the following are the results:—The admissions were last year—in January, 1164; February, 1200; March, 1320; April, 1453; May, 1579; June, 1701; July, 1689; August, 1472; September, 1365; October, 1373; November, 1264; December, 1273. Thus it appears that the *maximum* was in June, and the *minimum* in January; and on comparing the six hot with the six cold months, it will be found that the number of lunatics during the former was much the greatest.—*Paris Paper.*

Phrenology as an instrument of Flattery.—The following extract from the Third Series of "The Sayings and Doings of Sam Slick," contains a coarse but just satire upon the conduct of some precipitate phrenologists. "Soft sawder; that won't do.—Won't it tho', says I. I'll give you the same ingredients in a new shape, and you will swaller it without knowin' it, or else I am mistaken, that's all. So now, when I enter a location, arter a little talk about this, that, or the other, I looks at one of the young grow'd up galls airnest like, till she says, Mr Slick, what on airth are you lookin' at?—Nothin', says I, my dear, but a most remarkable development, says I; the most remarkable, too, I ever seed since I was raised.—Why, what in nater's that?

says she.—Excuse me, Miss, says I; and I gets up, and puts my finger on her crown. What benevolence, says I, and firmness of character! did you ever!—and then says I, a-passin' my finger over the eye-brow, you ought to sing well *positively*; it's your own fault if you don't, for you have uncommon petikilar powers that way. Your time is large, and tune great; yes, and composition is strong.—Well, how strange! says she; you *have* guessed right, I swear, for I do sing, and am allowed to have the best ear for music in all these clearin's. How on airth can you tell? If that don't pass!—Tell, says I, why, it's what they call phrenology, and a most beautiful study it is. I can read a head as plain as a book; and this I will say, a finer head than yourn I never *did see, positively*. What a splendid forehead you have, it's a sight to behold. If you was to take pains, you could do anything a'most. Would you like to have it read, Miss? Well, arter hearin' me pronounce aforehand at that rate, she is sure to want it read, and then I say, I won't read it aloud, Miss; I'll whisper it in your ear, and you shall say if I am right.—Do, says she; I should like to see what mistakes you'll make, for I can't believe it possible you can tell; it don't convene to reason, does it?—Nothin', Squire, never stops a woman when her curiosity is once up, especially if she be curious to know somethin' about herself. Only hold a secret out in your hand to her, and it's like a bunch o' canip to a cat; she'll jump, and frisk, and frolic round you like anything, and never give over purrins and coaxin' of you till she gets it. They'll do anything for you a'most for it. So I slides out my knee for a seat, and says, it's no harm, Miss, you know, for Ma is here, and I must look near to tell you; so I draw her on my knee without waiting for an answer. Then gradually one arm goes round the waist, and t'other hand goes to the head, bumpologizin', and I whispers—wit, paintin', judgment, fancy, order, music, and every good thing a'most. And she keeps a-sayin',—Well, he's a witch! well, how strange! lawful heart! well, I want to know! now I never! do tell!—as pleased all the time as anything. Lord, Squire, you never see anything like it: it's Jerusalem fine fun. Well, then, I wind up by touching the back of her head hard (you know, Squire, what they call the *amative* bumps are located there), and then whisper a bit of a joke to her about her makin' a very very lovin' wife, and so on, and she jumps up a-colourin', and a-sayin' it's no sich a thing: you missed that guess, anyhow: take that for not guessin' better! and pretendin' to slap me and all that; but actilly ready to jump over the moon for delight. Don't my clocks get just admired and then boughten, arter this readin' o' heads, that's all! Yes; that's the beauty of phrenology. You can put a clock into their heads when you are a-puttin' other fine things in too, as easy as kiss my hand. I have sold a tarnation lot of them by it."

An Incendiary Monomaniac.—At the assizes of the Eure-et-Loire, on the 11th instant, a boy fourteen years of age was tried and convicted on not less than six charges of arson. He is the son of a tailor at Alluyes, and appears, from the report of the trial, to be very intelligent. There was no evidence to shew that the crime, which was committed in open day, and with lucifer matches, was the result of any hatred to those whose property he attempted to destroy; and it was stated that his propensity for burning was so great, that on one occasion he set fire to the clothes of some females who were asleep in a field, and who were only awakened by their agony. It is a curious fact that whenever he had set fire to any building, he was the first to call for assistance, and appeared to be deeply affected at the misfortune of the sufferers. He was condemned to 12 years' imprisonment.—*Newspaper paragraph, June 1841.*

A Greek Phrenologist.—The Rev. S. S. Wilson in his "Narrative of the Greek Mission," published at London in 1839, p. 615, mentions that at

the table of Baron Theotokys in Corfu, he met a very intelligent Greek, who startled him not a little by the following unreserved statement: "I studied," said he, "in Germany. I became enamoured with the craniological theory of Gall and Spurzheim. On my return to the Ionian Isles, my father and uncle were dead. I felt an unconquerable wish to test the craniological system. The dispositions of my father and uncle I well knew. Oh, had I but their heads! Well, sir, I actually disinterred both; and have their craniums by me at this day!" He added, continues Mr Wilson, that "the result of his investigation was an increased confidence in the German theory."

Erratum.—In the title of the first article in our last Number, for "The Guarantee Society, for providing security," &c., read "The British Surety Company, for guaranteeing the fidelity of persons employed by others."—The former company, which has existed for two years in London, does not take the aid of Phrenology; the latter proposes to do, but has not yet commenced its operations.

Books received.—The British and Foreign Medical Review, Oct. 1841.—The Medico-Chirurgical Review, Oct.—Silliman's American Journal of Science and Art, April, July, and October.—Magdalenism: An Inquiry into the Extent, Causes, and Consequences of Prostitution in Edinburgh. By William Tait, surgeon, Edinburgh: Rickard, 1840. 8vo. pp. 268.—An Essay on the Connection of Mental Philosophy with Medicine. By Natham Allen, A. M., M. D., Editor of the American Phrenological Journal: Philadelphia, 1841. 8vo. pp. 32.—The Philosophy of Necessity, or The Law of Consequences; as applicable to Mental, Moral, and Social Science. By Charles Bray. Vol. I. London: Longman & Co. 8vo. pp. 299.—On the Claims which Phrenology has to be considered a Science: Addressed to the British Association assembled at Plymouth, 1841. By J. Q. Rumball. Plymouth: Hearder. London: Churchill. Pp. 13.—An Examination of reviews contained in the British and Foreign Medical Review, &c. By Martyn Payne, M. D. New York, 1841. 8vo., pp. 96.—Ethnographic Map of Europe; or the Different Nations of Europe, traced according to Race, Language, Religion, and Form of Government. By Dr Gustaf Kombst. Edinburgh, 1841.—Report of the Superintendent of the Crichton Institution for the Insane, 1841.

Newspapers received.—The Newcastle Great Northern Advertiser, Sept. 23.—The Yorkshireman, Sept. 25.—New Moral World, Oct. 2. and 9.—Wolverhampton Chronicle, Oct. 20. and Nov. 3.—Shrewsbury News, Oct. 30.—Hampshire Independent, Oct. 23.—New York New World, Aug. 7.—Devonport Independent, Oct. 23.—West Briton, Sept. 3.—Ulster Times, Nov. 18.—London Phalanx, Dec. 4. and 11.

The communications of Mr Rumball, Mr Kiste, Dr Jamison, and W. M. A., have been received.

Communications for the Editor (prepaid) may be addressed to Mr Robert Cox, 25 Rutland Street, Edinburgh. Books or parcels, too heavy for the post, may be left (free of expense) with the London publishers, Messrs Simpkin, Marshall & Co., Stationers' Hall Court.—Articles intended for the next following Number must always be with the Editor six weeks before the day of publication. Communications for the section of "INTELLIGENCE," and also Advertisements, should be in hand at least a fortnight before the same day. Charges for advertising:—eight lines, 6s.; twelve lines, 7s. 6d.; every additional line, 6d.; half a page, 14s.; a whole page, 25s. Advertisements may be sent to the publishers in Edinburgh or London.

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NEW SERIES.—No. XVIII.

L MISCELLANEOUS PAPERS.

- I. *The Right and Moral Relations of Property.* A Lecture delivered before the Mechanics' Institute of New York. By E. P. HURLBUT, Esq.

IF a quantity of corn be thrown upon the ground within reach of a flock of fowls, each one will greedily devour all that it requires to satisfy its appetite—but will go away without caring as to what remains, and without gathering up or secreting anything for future use.

If there shall be exposed to the reach of many of the tribes of squirrels certain nuts which they take as food, you will observe that they will take not only for immediate consumption, but that they will carry to their nests a very considerable supply, and hoard it up.

In the former case the animal has not an instinct to hoard—while in the latter this instinct exists. It is an innate propensity—and has no dependence whatever upon the sagacity of the animal. That sagacity may aid the animal in carrying this native desire into execution—but it does not call the desire into being. The propensity results from the animal's organization. It exists also in man, as a native instinct—not dependent upon his intellectual perceptions for its origin, but only for its means of direction and gratification. "Man," says Lord Kames, "is a *hoarding animal*, having an *appetite* for storing up things of use."

The phrenologists regard this appetite as an innate propensity, having its seat in a particular and well-defined portion of the brain—whose exclusive function it is to manifest this desire—by them denominated Acquisitiveness. It is the desire of acquisition—the love of possession. It may exist

without the powers of reason—nay, it may defy those powers. It may exist without the human sentiments—nay, it may rage in opposition to them. It is, in the abstract, a blind passion—without moral or intellectual aim—happy, in the possession, without knowing why—relishing gratification, and pained upon denial. Of itself, it has neither reason, conscience, nor pride. It asks not why or wherefore it should be gratified. It cares not who is pained, so that it be pleased. It is happy, but not proud of its possessions.

In the abstract, then, this instinct in man enjoys no greater dignity than in animals—and, regarded of itself alone, would claim no higher consideration. But the moment you consider man as endowed with reasoning faculties, to discover the end to which the fruits of his acquisition may be devoted, this blind instinct assumes a new importance and dignity. It is relieved in a great measure from its animal estate, and takes a more elevated position. It becomes an enlightened passion. Utility springs up where blind possession reigned—and order bears sway, where all before was confusion. The innate desire, is still as strong as ever, but it spends its force in a new direction. It ceases to control the will of the animal, and is tutored to obey the will of the man. Thus, under the guidance of human reason, this desire prompts man to guard against want, and becomes essential to his life and safety. It is a new desire, whose enlightened gratification is of primary necessity to his bodily welfare—and, therefore, lays the foundation of a right—but not a right of the most sacred character. It is a right pertaining to his animal existence as one means of its preservation. That existence itself is, as yet, of little value, and the means of its preservation cannot rank higher than the end which it subserves.

So far I have considered this instinct as associated only with the powers of reason. Let the sentiments proper to man now be added to the account, and the case is greatly magnified. The instinct to acquire remains—as also its enlightened gratification as a means of preserving life—and a new existence is to be ministered unto. Not an intelligent animal only, but a moral being, is now to be preserved and gratified; a man—endowed with conscious pride—with holy reverence—with gladdening hope—the love of the beautiful and perfect—and sweet benevolence—a sense of justice crowning all and sternly demanding the right. His existence is clothed with a new and awful dignity; and whatever tends to its preservation—whatever favours its gratification now—is far more sacred and important than before. Disturb him now in his acquisitions, and you wound not an animal instinct alone, but you deprive

him of that which ministers to his higher nature, and you wound him there. You wrest from him one of the supports of his independence, and his pride is mortified—you blast his hopes—take from his benevolence the means of accomplishing its blessed work—embarrass his aspirations to the beautiful and perfect—and outrage his quick sense of justice. You have now stung his moral nature with anguish, and outraged right—a right now consecrated by the most sacred emotions of his mind.

The humble instinct with which we started, now ministers, under the guidance of reason, to the moral wants of a noble being—a man, aspiring to the perfection of his exalted nature—a member of human society, filled with the love of his brethren—a parent training for happiness the offspring of his sacred love; and ends like these consecrate the means of their attainment. One of the greatest of these means is property—and hence the sacred inviolability of the right.

A being endowed with an instinct to acquire, and self-esteem alone—with no more intellect than would suffice to gratify this solitary propensity and sentiment, placed in man's circumstances—would have a species of right to exclusive property. The enjoyments which this being would derive from wealth, would be of a very narrow and selfish character. Such a being is not altogether fictitious—but Nature is too kind to allow many such to appear among us—and probably designed them as human contrasts—that we may the better appreciate the genuine, the sterling man.

After taking this view of the subject, we may be surprised to find that the origin of the right of property has been regarded as doubtful or obscure by the most intelligent writers upon natural law.

Sir William Blackstone speaks with little certainty upon this subject; saying, “that the original of private property is *probably* founded in nature”—“but *certainly* that the modifications under which we find it, the method of conserving it to the present owner, and of transferring it from man to man, are *entirely* derived from society, and are some of those *civil advantages*, in exchange for which every individual has resigned a part of his *natural liberty*.”*

Some writers refer the right of property in land to *occupancy*—contending that this alone not only conferred the right to *use* the soil, but also the original right to the permanent property in the *substance* of the earth itself—and that this occupancy is founded upon the implied consent of all mankind, that the first occupant should become the owner; while others admit that occupancy confers this right, but lay out the im-

* 1 Bl. Com. p. 139.

plied consent of mankind as unnecessary, alleging that the very act of occupancy alone, being a degree of bodily labour, is sufficient of itself to gain a title.*

Mr Locke says, that "The labour of a man's body and the work of his hands, are properly his. Whatsoever, then, he removes out of the state that nature has provided and left it in, he hath mixed his labour with, and joined to it something that is his own, and thereby makes it his property."

Mr Christian denies the soundness of this proposition, and says, "that mixing labour with a thing can signify only to make an alteration in its shape and form—and if I had a right to the substance before that labour was performed upon it, that right still adheres to all that remains of the substance, whatever changes it may have undergone; if I had no right before, it is clear that I have none after, and we have not advanced a single step by this demonstration." He continues—"But how or when does property commence? I can conceive no better answer can be given than—by occupancy, or when any thing is separated for private use from the common stores of nature. This is agreeable to the reason and sentiments of mankind prior to all civil establishments. When an untutored Indian has set before him the fruit that has been plucked from the tree that protects him from the heat of the sun, and the shell of water raised from the fountain that springs at his feet, if he is driven by any daring intruder from his repast, so easy to be replaced, *he instantly feels and resents the violation of that law of property which nature herself has written upon the hearts of all mankind.*"

On the other hand, Mr Bentham says, "Property and law are born together, and die together. Before laws were made, there was no property; take away laws and property ceases."† He, however, admits that, in the natural state, man had an expectation of enjoying property, to a limited extent.

"It is not known," says Mr J. Fennimore Cooper, "that man exists any where without establishing rules for the protection of property. Even insects, reptiles, beasts, and birds have their possessions in their nests, dens, and supplies. So completely is animal existence in general, whether in man or beast, dependent on the enjoyment of this right, under limitations which mark their several conditions, that we may infer that the rights of property, to a certain extent, are founded in nature. The food obtained by his toil, cannot be taken from the mouth of man or beast, without doing violence to the first of our natural rights. We apply the term of robber or despoiler to the

* See Bl., vol. 2. p. 8.

† 1 Bentham's Theory of Legislation, p. 139.



reptile or bird that preys on the aliment of another, as well as to the human thief.”*

But Chancellor Kent regards the right of property as derived from the organization of the human mind, and treats of its relation to the human sentiments with far greater truth and clearness than any of the preceding writers. He says, “The *sense* of property is *inherent* in the human breast, and the gradual enlargement and cultivation of that sense from its feeble form in the savage state, to its full vigour and maturity among polished nations, forms a very instructive portion in the history of human society. Man was fitted and intended by the author of his being for society and government, and for the acquisition and enjoyment of property. It is, to speak correctly, *the law of his nature*—and by obedience to this law, he brings all his faculties into exercise, and is enabled to display the various and exalted powers of the human mind.” “The *natural and active sense of property* pervades the foundations of social improvement. It leads to the cultivation of the earth, the institution of government, the establishment of justice, the acquisition of the comforts of life, the growth of the useful arts, the spirit of commerce, the productions of taste, the erections of charity, and the display of the benevolent affections.”†

It is, however, obvious that no adequate conception can be formed of the right of property, the protection which it requires, and the manner of its enjoyment and transmission, without a true mental philosophy, which shall unfold the innate powers and dispositions of the human mind, and their relation and adaptation to external nature.

Let us, then, inquire more particularly into the relation which property bears to mankind, the diversity of their powers for its acquisition, and into human laws regarding its acquisition and protection; reserving for future examination some of the subjects of the right of property, and its transmission upon the death of the owner.

And first, we have seen that man’s simplest relation to property is that of an animal desiring its acquisition with an intelligent design. A few primary ends are answered by its possession, and these are the ends of mere animal desire. His love of food, of safety, and of life, must be gratified. His intellect guides the acquisitive instinct to the attainment of these simple ends—which done, his animal wants are satisfied. If man regarded property with no higher aim than this, his acquisitions, if limited by his rational faculties, would be extremely

* 2 Kent’s Com. 318.

† American Democrat, p. 136.

small. As he perceived the limit of these simple wants, they would define the extent of his possessions. The animal would now be satisfied—but the *man* would not be content; and why? Because the same intellect which should perceive the true relation of property to his animal nature, would also as clearly perceive its relation to the human sentiments, and these demand more extended possessions for their indulgence and gratification. Accordingly, man is impelled by his moral emotions to increase his acquisitions of property. The pursuit of property has now a moral aim, and its character and dignity depend wholly upon the moral constitution of the person in quest of it. If self-esteem be the reigning sentiment of his mind, it will be sought as the means of gratifying his pride; if love of approbation bear sway, he will pursue wealth to gratify his vanity; if philoprogenitiveness lead his faculties, he will hoard for his children; if reverence be greatly predominant, he will gather property to erect temples for Divine worship; if the love of the beautiful predominate, he will seek wealth in order to expend it in cultivating the arts, improving his grounds, and surrounding himself with order and beauty; and if benevolence be his controlling sentiment, he will regard wealth as the means of doing good to others, and expend it in acts of charity and general beneficence. If, however, the moral forces of his mind be properly balanced, he will not seek wealth for the indulgence of any single sentiment, but for the harmonious gratification of his entire moral nature. An enlightened sense of justice will dictate the means of acquiring wealth—and all the remaining moral wants of his nature will in their turn be subserved by its expenditure.

Thus do we ascertain not only the source of the simple right to exclusive property—but also of the higher and more sacred right to exclusive wealth. The former has an humble origin and a narrow limit: the latter a high moral use, and its limit cannot be defined. The one pertains to an intelligent animal, as a simple means of preservation—the other pertains to an intelligent moral being, as a means of perfecting his greatest happiness. I infer from these premises, that the Creator designed that man, as an intelligent moral being, should enjoy not only so much property as will satisfy his mere animal wants—but that he should strive for and attain something of wealth also, to minister to the high demands of his moral sentiments. Wealth, then, in this view of the subject, is *any excess* of property beyond what is required to satisfy the simple wants of man's animal nature—and his relation to wealth is that of an intelligent moral being, struggling for its acquisition and protection, as a means of satisfying the wants of his

moral sentiments. The pursuit of wealth, then, by mankind, is natural, meritorious, and rightful—its true enjoyment a moral happiness, and its exclusive possession a sacred natural right.

The abuse of wealth consists in allowing it to minister to the animal appetites chiefly, or in expending it to gratify some one or more of the sentiments to the exclusion of the others—and not appropriating it to the harmonious gratification of all the sentiments proper to humanity. The abuse first mentioned is a moral offence, and may so endanger society as to require legal prevention; while the latter abuse can scarcely be evidence of such moral turpitude, as the laws of man ought to recognise. The laws may prevent the ministration of wealth to low animal indulgence, but they may not restrain excessive benevolence, nor overweening pride, nor foolish vanity. A man may bestow his wealth in an unworthy charity, and we can only regard it as a weakness; or he may impoverish himself by dress and vain display, and we cannot complain of him to the police. He has a right to be a fool, if nature made him so; but we cannot safely allow him to be a knave, whether nature made him such or not.

Wealth, then, is to be regarded as a means, and not as an end; and unless it constantly subserve the sentiments, and is used to exalt the moral nature of man, it hath little utility or dignity, and is to be regarded as an useless heap, gathered together under the impulse of an animal instinct, and retained only to gratify a blind propensity. To pursue it from the mere love of possession, is to allow an animal feeling to control the man, and gives to a mere propensity the sovereignty of the mind. This subjugation of the intellectual powers of a noble being to the service of an animal instinct, sometimes occurs in society; and the miser's wealth is so blindly grasped, that it scarcely satisfies the pressing wants of his animal nature. His intellect merely guides him in the mode of its acquisition—it is not exercised to discover the utility of wealth. He has it, and yet *the man* possesseth it not—but only the animal. Wealth is *acquired* by means of the intellect acting under the impulse of an animal instinct: it is *enjoyed* only through its ministration to the wants of man's superior sentiments. An intelligent animal may acquire, but a moral being only can enjoy wealth.

I come next to inquire into the diversity of men's natural endowments with reference to the acquisition of property; for upon this depend, in a great degree, the inequalities of their estates.

If an animal having an instinct to hoard his proper food, be

placed among other animals which have not this instinct, the former will soon be found in possession of a considerable store of provisions—while the others will be destitute of any. This result would inevitably follow from their respective organizations. The instinct of the hoarding animal would prompt the employment of its faculties in obtaining this particular gratification; and it would succeed, because Nature, having given the desire, surrounds it with the means of gratification, according to her uniform law. Moreover, the hoarding animal would encounter no opposition from those that hoarded not—since their natures do not impel them to a competition in this respect. The former, then, would be gratified in proportion to its natural desire for acquisition, its faculties to attain its ends, and the amount of competition or other embarrassments in the way of its selfish gratification. In the circumstances supposed, if this animal desired to possess all, and had the faculties to compass all, it would necessarily take and retain all to the exclusion of others.

Let us now change the case, and suppose many animals placed together in circumstances favourable to the gratification of their natures, all having the innate desire to hoard up food; what now will be the result? Each animal will hoard, and the amount of its stores will be proportionate with its instinct to acquire—its faculties to attain its objects—and the number of its competitors. By the law of their natures, all these animals must have something—dependent as to quantity upon each animal's organization, and its external circumstances. Now, if all these animals should be endowed with equal love of acquisition, and equal faculties to gratify it, and should be placed in equal external circumstances, their possessions would be equal; as like causes must produce like effects. But if they should be endowed either with unequal desire of acquisition, or unequal faculties for its gratification, or should be placed in unequal external circumstances, their possessions would also be unequal.

We may conclude, in reference to these animals, that if Nature designs an equality in their possessions—they will be found to be endowed with equal instinctive and intellectual forces—and be placed in equal external circumstances; and the reverse must also be held. But Nature delights in diversity throughout all her works—she maketh not only the various tribes of animals to differ from each other, but causeth the several individuals of the same race to differ in the form and activity of the various instinctive and intelligent powers of their nature, and placeth them in circumstances also greatly differing—so that natural equality doth not exist among them.

The same natural diversity obtains among men, and like results follow.

One man is endowed by Nature with a strong instinct to acquire, with liberal faculties for the attainment of wealth, and is placed in circumstances favourable to the gratification of his wishes. He amasses large possessions by the concentration of his mental faculties upon this object alone. Another man, his nearest neighbour it may be, has an equal endowment of the acquisitive instinct, and enjoys the same external advantages, but has not an equal endowment of intellect to perceive the best method of attaining wealth, or he lacks firmness or perseverance of character, and so he obtains less.

Another, with equal instinctive impulse, and equal faculties to subserve it, may, in the course of his life, have attained as much property as the man first mentioned, but, having all along perceived its true use, may have expended it largely in the gratification of his taste, in acquiring knowledge, and in acts of benevolence, so that he cannot now exhibit so large a pecuniary estate ; but he is in a far better moral condition.

Another man may have the most favourable endowments for the acquisition of wealth, and may have excelled all before named in the amount of his accumulations ; but from too sanguine hope, or excessive credulity, or gross fraud, may lose in a day the fruits of many years of anxiety and toil.

Let those who modestly demand an equal distribution of property in the halls of human legislation first raise their cry in the temple of Nature, and if possible obtain a reversal of those stern decrees of Fate, which have ordained a great part of the inequality of which they complain. Let those who ask for a "division of property every Saturday night," be first certain that all men had an equal start on the previous Monday morning ; and if they find that Nature has been guilty of foul play in the premises, by favouring one man above another, let them take such course as their sages shall advise to remedy the mischiefs of Fate ! They will perhaps point out a mode by which the gradations of Nature may be abolished ; by which all creatures shall be made men ; and all men become equal and alike in form, countenance, and faculties, so as in no way to be distinguishable, the one from the other, either physically, intellectually, morally, or otherwise ; and thus would be produced glorious equality and exact uniformity, so that whosoever should see and know one of these newborn creatures, would know the form and faculties of every dweller upon the earth !

This might produce considerable monotony, some inconvenience, and a loss of many comforts derived from the animal

creation. We should, for instance, have to dispense with oysters altogether; every one of these interesting creatures would become a man, and would be as likely to devour others as to be eaten itself!

But to be quite serious. The laws of man's mental organization indicate the acquisition and enjoyment of exclusive property; and hence the right of property. But these laws certainly do not indicate any natural design that all men shall possess an equal amount of property; but so far as we can interpret these laws the reverse is established. It follows, then, that the right of property in man must be recognised and sacredly protected by human laws; but the amount of each individual's acquisition is to be left to the laws of his organization. Human laws must protect whatever he hath; but he must have a higher dependence than these for the magnitude of his possessions.

Let us now see what human laws have to do with the modes of acquiring property; and it seems to me that they have but one office to perform, and that is to prohibit its acquisition by any means which shall offend the enlightened moral sentiments of mankind. It is not the office of the laws to aid the faculty of Acquisitiveness—the best service they can do to man in this respect is to let him alone—neither to aid, obstruct, nor direct his faculties, but to leave him to his natural destiny.

This would dispense with many volumes of human legislation, every chapter of which tends to increase the difficulties of men's conditions, to create artificial agents and responsibilities among them; to foster partiality and favouritism, and to produce such a general complaint against the unequal distribution of the blessings of wealth. We have seen that a natural disparity exists among men in regard to their powers of acquisition; but that the general design appears to be, that all men shall have not only property sufficient to satisfy their animal wants, but an excess beyond that for the gratification of their moral natures. And as a general thing, in the absence of unwise and unjust human laws on the subject, the great mass of mankind would attain the means of such moral gratification. The laws of all countries interfere too much in regard to the means of acquiring property; and the inequality and injustice of most of them are too flagrant to require pointing out. It is to the more subtle and less perceptible aggressions of our own laws that I wish to call your attention, and ask you to notice a few instances of their wide departure from the obvious precepts of the natural laws.

We have seen that man was ordained to live in the social state; and we established this from his mental constitution, by which he seems destined to live and move among intelligent

moral beings, and among such only. Every agent which is brought in contact with him, must be so constituted as to have moral responsibility. He cannot, from the very laws of his organization, properly meet and deal, as a man, with any other. Now your laws create artificial persons by thousands, under the names of bodies corporate, and bid them compete with men in the acquisition of wealth. The Creator has mercifully omitted to place among intelligent moral beings these monsters—with instincts to grasp, and faculties to acquire, but without a moral or restraining nature. A man is single, and relies upon his individual resources ; a corporation, embracing the consolidated powers of many, overbears and defeats individual exertion. The creature whom God made, retreats before the offspring of man's own creation. A man is of slow growth, and passes through various stages of weakness to his final maturity ; while this artificial person springs from your statute-book full grown, mature and ripe for action. A natural person may be afflicted by disease, so that his success may be impeded ; while your legal creature suffers from nothing but legal difficulty. Man has a moral nature, which restrains him from meanness, fraud, and selfishness ; while this artificial person knows no restraint but that which proceeds from the laws, and these are too often of its own ordaining. The man has moral wants that require gratification as he journeys on through life ; but this artificial person has no want but money. Man has a conscience ; while this creature has only a sense of expediency. The former sacrifices pecuniary to moral interests ; while the latter doeth the reverse. Man stretches out his hand to relieve ; while a corporation reaches it out only to receive. Man has at stake upon his conduct in society, his honour, conscience, liberty, happiness, and life itself ; while this artificial being has nothing at stake but its charter. And lastly, man dies before his plans are executed ; but this being having perpetual succession, lives on—and when it ceases to exist, nobody dies, but a corporate body.

Now, who doth not perceive that the creation of such an artificial person, with a legal instinct to acquire, with legal powers to obtain wealth, but destitute of any but *legal emotions*, is but a contrivance to avoid the restraint and inconvenience of man's moral nature in the acquisition of wealth ? What better method for such evasion could be contrived ? Perhaps a true conception of the Evil One, is that of a being endowed with a mighty intellect, but utterly destitute of any moral emotion, save that of pride alone. The indefinite multiplication of such creatures upon this earth, to compete with moral beings, would soon discourage its present inhabitants, and a large human emigration hence would be the probable result !

Corporate bodies, as organized in the United States, are in general exempt from complete pecuniary responsibility. They respond to their debts only to the extent of their stock; the holders of it are not in general personally responsible. Through the means of a corporation, a man may risk any sum he pleases upon an adventure for gain, by taking a particular amount of stock; the adventure may prove disastrous through want of skill, integrity, or from any other cause, and the corporator loses only the sum which he paid for the stock—although the adventure may have sunk three times that amount; while a natural person, who should embark in a similar adventure and fail to the same extent, would be required to respond to the whole amount of the loss, let the sum originally advanced in the enterprise be what it may. The corporation may wholly fail, and yet all the stockholders may remain rich. They have, therefore, all the chances and advantages of gain, which a natural person enjoys, and are exempted from the same extent of loss. Here is a privilege and an exemption indeed! How much more considerate is the law of its own creatures, than of the creatures of God!

Here is an artificial person, dealing among men, without moral, and with a limited pecuniary, responsibility. But in regard to the former, it may be said, that a corporation has an aggregate moral existence—that, being composed of men, human sentiments enter into its constitution. If this could be proved by argument, it would be contradicted by experience. Is not the contrary demonstrated by its action? Is it benevolent? Let its records bear witness that it *feels* for men's pockets rather than for themselves. Is it religious? Alas! it "has no soul" to save! It is just? As the law compels it. Is it honourable? None answer for it; and it has no back to scourge, no body to pierce. Has it passion? Ay; one mean passion—avarice—whose bounden slaves are the agents of the corporation. This passion, and its demonstration through these agents, are all that is felt or known of this artificial person. It is an acquisitive monster, with human intelligence, but without moral emotion or aim—a Ralph Nickleby in character, but destitute of his amiable relatives.*

But it is said, that if corporators were held in every way re-

* There would be more difficulty in awakening the moral sense of a corporation, than Rowland Hill experienced on a particular occasion—when, his chapel having been infested by pickpockets, he took occasion to remind his congregation that there was an all-seeing Providence to whom all hearts were open, and from whom no secrets were hid: "But lest," he added, "there may be any present, who are insensible to such reflections, I beg leave to state that there are also two Bow-street officers on the look-out!" (London Qr. Rev. for Dec. 1840.) A corporation would be alike insensible to either of these admonitions.

sponsible, as natural persons—no body would take a charter. Then I answer, so much the better for the natural man—the world's business would be conducted by human agents, as seems to have been the natural design.

But then, is there no fear that a great many things could not be done by natural persons, which are now accomplished by corporations? I answer that a combination of wealth and effort can exist among men without corporations—and that it seems probable that Nature did not contemplate any action in this world except by natural persons—and if so—then what they cannot do, may be very properly left undone. The great design of Nature is the perfection of moral beings in excellence and happiness. Wealth ministers to the accomplishment of this design—but no more is necessary for this purpose than can be attained by individual exertion—or by simple association. The true "internal improvement" is that of the inner man. The best road man can travel is the *highway* to happiness—and the only "works" which benefit that, are those which improve his moral and intellectual powers.

Our generation has run wild after physical improvement. External nature has been fashioned anew. We have overcome time and space—outdone our ancestors, and overdone ourselves. It may be well to pause and consider whether ours has not been a mere physical movement—which has sent the *animal* ahead with railroad velocity—but left the moral nature of man to come on behind at the old ox-team pace. I incline to the opinion, that we had better stop our cars until our better-selves shall join us—so that when we start again, we shall at least have our old friend Common Honesty for a travelling companion! Our fathers were acquainted with several plain and homely virtues—that have been strangely forgotten by their children, since they have set up for such smart people! We boast of having "overcome distance;" let us try to overcome that fearful distance at which we stand removed from the integrity, purity, and patriotism of our noble ancestors. Let moral and intellectual improvement be the chief aim of our citizens; for the salvation of the Republic depends upon it.

Again, credit and confidence are already provided for by the natural laws—they are the offspring of the moral constitution of mankind; and human legislators have seldom attempted to meddle with them without injurious results.

The true "Credit System" is the creature of divine and not human laws. Man is endowed with the sentiments of faith, hope, and benevolence—with an intellect to enlighten and guide them. These respond to the demand of every individual who addresses them—and repose upon his intelligence,

truth, and justice. He speaks truly, and is believed—asks aid, and it is granted to him—seeks credit, and it is awarded to him as he may seem to deserve. Man was ordained by the laws of his being to have faith in man—an enlightened and sacred faith in an intelligent moral being. Now, if the sentiments which originate this faith shall be trained by wholesome exercise, and enlightened by the intellectual faculties, blind credulity will not be substituted for reasonable confidence, nor delusive hope for rational expectation—and the experience of mankind will enable them to determine with a great degree of safety in what cases and to what persons they may extend their confidence and trust. These would be given to good sense, integrity, skill, economy, and industry alone. A man possessing these, demands the confidence of his brethren—and they necessarily repose their faith in him.

It is neither correct in morals nor safe in business to trust to property alone. Credit must be given to *the man*, and not to his external circumstances. The man changes not—but his circumstances ever change. In the first case you risk only the life of your debtor—while in the latter case you risk a mistake in the genuineness of appearances—the errors of a weak understanding—the danger of fraud—the mistakes of ignorance—and losses arising from idleness and inattention to business. These, or any one of them, may, in a very short time, lose, squander, or conceal all the property which you trusted—and that gone, you have no reliance but the man himself—and him alone you had not trusted, and would not trust. But if you base your confidence upon the qualities of the man alone—you but follow the impulses of your enlightened moral sentiments—and your only hazard rests upon the life of the man. Upon this principle credit would be a matter of moral concern—and intellectual and moral wealth would be a sort of capital in trade. “Thrift would not follow” lying—and in general a man would have first to become bankrupt in his intellectual and moral estate, before he would be bankrupt in trade.

This is *Nature's Credit System*—and those who are not furnished with the capital which it demands, must even—“buy for cash.” But not content with this simple foundation of all credit and confidence, the social body set about making laws which throw new elements into the system of credit—and ordain for man an artificial Faith, grounded upon legal appearances.

The laws create corporate bodies—declare them worthy to be trusted, and demand public confidence in their behalf. But

does the law endow its creatures with sound judgment, high integrity, consummate skill, careful economy, and untiring industry, the necessary elements of credit and business worth? Surely not. For the particles of which the body of this artificial person is composed, may change every day—and, unlike the component parts of the natural body, may not be replaced in kind, but by inferior materials; and what the law at its creation pronounced to be very good, may in a short space of time become very bad—and yet the law still proclaims it good. Nay, the law may have mistaken its qualities at the beginning—and a mistake in the law is very easy—for it is not unjustly charged with “uncertainty.” Upon the natural laws, which have a divine origin and a certain operation, man may rely; but when he trusts to the artificial creation of human laws, he prefers the counterfeit to the genuine coin.

The most sagacious men in society may not place as much faith in a legal effigy as in a true man; but be it remembered that in the common mind there is a great reverence for what the laws ordain (and this is fortunate, when the laws are just); so that too many may be deceived by the implied public guarantee that all is right, and yield their confidence without exercising their judgment in the premises.

It would go hard with Mr Astor, before, as a *mere man*, he could get his plain notes to circulate as money, to the amount of one-twentieth of what he is actually worth; while a corporation, by dint of a public law and a good engraver, can get their pictorial promises, in the shape of notes of the “Patriotic Copperplate Bank,” to circulate to three times the amount of their actual capital, without much difficulty!

Why is this? Because we have been reared under a false and artificial system of credit—to the exclusion of the true one. The law has been busy, where it had no business—has declared that to be good, which was only *pretty*—and proclaimed a promise upon fine paper to be better than one written upon foolscap. To all which the people cried “Amen!” They took high houses—filled them with splendid furniture—set up their carriages—plunged into debt—bought every thing—sold anything—and paid for nothing. The plough stuck in the furrow—the shuttle ceased to move—the earth was partitioned “by the small”—twenty-five by one hundred feet was a divine space—water rose—land towered above it—everything went up in value—save money that was valueless. A small engraving was a large fortune—a “corner lot” was a “principality”—and wealth was “power.” Man was nothing—his estate was everything. “The poor we had not with us”—and that portion of the Scripture touching so disagree-

does the law endow its creatures with sound judgment, high integrity, consummate skill, careful economy, and untiring industry, the necessary elements of credit and business worth? Surely not. For the particles of which the body of this artificial person is composed, may change every day—and, unlike the component parts of the natural body, may not be replaced in kind, but by inferior materials; and what the law at its creation pronounced to be very good, may in a short space of time become very bad—and yet the law still proclaims it good. Nay, the law may have mistaken its qualities at the beginning—and a mistake in the law is very easy—for it is not unjustly charged with “uncertainty.” Upon the natural laws, which have a divine origin and a certain operation, man may rely; but when he trusts to the artificial creation of human laws, he prefers the counterfeit to the genuine coin.

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Why is this? Because we have been reared under a false and artificial system of credit—in the exclusion of the true one. The law has been long, where it had no business—has declared that to be good, which was only poor;—and proclaimed a promise upon fine paper to be better than one written upon falsehood. To all which the people cried “hoax!” They took nothing;—all their will splendid fortunes—set up their carriages—plunged into debt—bought everything—sold anything—and paid for nothing. The plunge made in the furrow—the shuttle crossed in vain—the earth was partitioned—“by the wall!”—twenty-five for one hundred foot was a divine space—water was had—land covered above it—everything overtopped in value—more money than was relations. A small engraving was a large fortune—a “corner lot” was a “principal”—and “nothing was” gone! That was nothing—the estate was everything. The poor are laid out with us—and the portion of the beggar nothing is longer.

paper (Transactions, vol. cxvi. p. 163), describing his discovery of a double nervous apparatus, or circle of nerves connected with the muscles, the one nerve conveying to the brain information of the state of the muscle, and the other bringing back the adequate nervous influence to control, guide, and move it, that Mr S. began to think that two faculties are engaged in this operation: the one a *passive sense* for feeling mechanical resistance, the other an active faculty for *applying* counter-resistance; the *sensitive* nerve serving the one, the *motor* nerve obeying the other. Mr S. had been asked to define a *sense*, as distinguished from any other perception. He considered it enough to distinguish their instruments, not their characters. That perception is a sensation, which is occasioned by a material object acting upon an external bodily part, and thence affecting an organ in the brain, by a *nervous* communication. Such are the five senses. The resistance sense is of the same description. On the other hand, such perceptions as Form, Size, &c., have cerebral but no external organs, like the senses. Sir C. Bell had discovered that two nerves, having distinct origins or roots, passed into one sheath for the supply of the muscles; and disease had shewn that the sensitive power and the motor power might be respectively and separately suspended. He further shewed that the sensitive nerve passed forward to the skin, and *there* constituted the channel of the sensations of pain, and heat and cold, which are quite different from resistance to the muscles. There was considerable doubt as to whether these nerves supplying the skin were identical with, or distinct from, the nerves which informed the brain of the state of the muscle; but this doubt seems removed by the case of the muscle called the *motor oculi*, which is supplied with a nerve *purely muscular*, giving the sensation of the state of the muscle, but not proceeding to and spreading out in the skin.

Sir Charles Bell read a paper recently to the Royal Society of Edinburgh (Transactions, vol. xiv., Part I., p. 226), in which he says—"We come next to the *third nerve*. This nerve is distinguished from all others; its origin is peculiar, and *its distribution limited*. By universal consent, it has got the name of *motor oculi*, being distributed to the voluntary muscles of the eye, *and to none others*; so that it directs the axis of the eye in vision, both controlling the muscles, and having the farther property of conveying to the mind the impression of the condition of the muscles. I entertain this idea, because it is a double nerve.

"*Its Origin*.—Our best authors describe this nerve as arising from the *crus cerebri*, and so it does, above all the intricacies of the nervous system; it does not enter into the

mixture of originating filaments in the *pons* or *nodus* ; it does not communicate with the decussation in the *medulla oblongata* ; it is in direct communication with the brain.

"As I have already shewn that the *crus cerebri* consists of two columns—one of motion, the other of sensation, and that the *corpus nigrum* divides these columns : if a section be made of the *crus* just anterior to the origin of the third nerve, we shall find that we cut through the *corpus nigrum*. And now if we take the curette and gently divide the two columns, and so separate them in the direction towards the root of the nerve, we shall divide or split it ; shewing that part of it arises from the anterior column, and part of it from the posterior column. If we carefully dissect and lay out the third nerve, we have a very interesting view as illustrative of its function, and of the nervous system. The roots as they arise, and for some way in their course, are in round distinct cords, running parallel to each other; they then join together, and form a dense body, in which the filaments are separated, rejoin, and are matted together ; after which their progress is as a common nerve. Their distinct origin from the division of the *crus*—the two distinct fasciculi of parallel fibres—the course of these for some way without exchange of filaments, and then afterwards running into intimate union, are circumstances of much interest, as shewing the distinction of the *crus cerebri*, the distinct nature of the roots of the third nerve, and that it is a double nerve dedicated to the finer motions of the eye, peculiar in its structure, and yet in conformity with the system which I have followed.

"A question is naturally suggested here. Is the third nerve a *sensitive* as well as a motor nerve ; and if so, how comes it that there is no regular ganglion on the root which it receives from the sensitive column ? This would incline me to believe, that the ganglionic root is an organization on the spinal nerves and fifth pair, suited to that sensibility which the body universally, and the *surface* especially, enjoys, which gives pain, and becomes a guard upon the frame.

"At the same time, it will not be overlooked that the texture of the nerve at the union of the fasciculated roots very much resembles the texture of the spinal ganglion. The difference may be reasonably attributed to the distinction in office ; *i. e.*, that it has no reference to the sensibility of the surface, but only to the condition of the muscle.

"The very peculiar and unique position of the roots of this third nerve, whilst it places the function of volition directly in communication with the sensorium, and unembarrassed by communication with other nerves, has also this superior advantage, that it is in direct relation to the sensitive column.

This connection, as I have just said, has no reference to common sensation; *for the nerve is strictly limited to the muscles, but only to that property of estimating the condition of muscular activity.*"

The extent of Sir C. Bell's discovery, in other words, that he has discovered a nerve, the servant of the muscular sense, distinct from the common sensitive nerve, has been disputed. Mr Simpson held, that the case of the nerve subserving the *motor oculi* is conclusive in his favour; that there is a muscular nerve, and a *sense* of the state of the muscle; and, seeing that it can only be some kind of resistance which operates on the muscular sense, resistance must be the object of that sense.

But if this were all, we should be left with a mere passive sense, which would be of no use to us, and we should perish. We have something to *do* as well as to feel, and therefore must possess an *active power* as well as a *passive sense*. The latter would never move our muscles; so that there must be a voluntary positive act, and a *motor* nerve as its instrument. The conclusion seems unavoidable, that, in every change produced by an act of the will, through the instrumentality of the motor nerves, on the state or condition of even the minutest of above four hundred muscles, with which the human body is furnished, two distinct functions are exercised, two separate operations performed. The *muscular sense* does its specific duty, and reports *inwards* to the brain the *state* of the muscle, whether in repose or tension, and in what degree of tension; subsequently, although instantaneously, the *faculty of muscular adaptation*, or voluntary motion, performs its part, and with the most perfect calculation of the degree of counter-resistance, changes the degree of contraction; in other words, the state of the muscles.

The knowledge of resistance being acquired from gravitation and impenetrability, and of force from the instinct of muscular counter-resistance, the combined effect, probably as the result of experience, is much more extensive than the regulation of our muscular movements. We can perceive the mechanical relations of external matter to external matter, and provide for our safety and increase our power by taking advantage of these relations. We find the different relative powers of resistance, called their density, in different kinds of matter; and, availing ourselves of this knowledge, and exercising another faculty, namely, Constructiveness which manually fashions, forms, and constructs, we make tools and instruments; hence we know and prize iron as the most valuable of metals, and form the axe, the chisel, the knife, and the saw.

able a class of men, was voted to be apocryphal. All—all—were rich—very rich—on paper. Men were at large, stuck over with lithographed maps, that ought to have been in prison—and others transferred stocks, who ought to have been transferred *to them*; the inventor of paper was deified—and the engraver was added to the calendar of saints.

The bubble burst—the false credit system of human invention exploded—burying beneath its mighty ruins the good and the bad—the prudent and the headlong—the rich and the poor. The destiny of the one had become so interwoven with that of the other, that honesty and knavery, economy and prodigality, sense and folly, were entombed together! So will it ever be, when we infringe the laws of our organization, and pay greater respect to the legislation of weak and erring man, than to the wise and immutable laws of the Creator.

At a period of great mercantile distress in this city, not long ago, a very distinguished president of a very distinguished bank, came on here to afford the wished-for relief. He moved through Wall Street like a prince—and crowds followed in his train. A gentleman, seized with a sudden admiration of his greatness, pointed him out to the admiring crowd and exclaimed—"I would rather be that man this day, than Autocrat of all the Russias."

Alas! "How are the mighty fallen!"

When will legislators allow Nature to be heard in the councils of state—and, ceasing to obstruct legitimate human action, and to confer privileges, set about the mere protection of human rights? The law should be man's protection, not his guide. It must be silent as to the acquisition of wealth, save only to forbid its accumulation by means offensive to natural morality—and when it speaks respecting it, it must speak for its protection only. Let human industry and skill seek their own legitimate course of action. Let them neither be fostered by bounties nor discouraged by frowns. Trust to man: his resources are of divine and not of legal origin. He will do better for himself than the laws can possibly do for him. What knoweth the law of business? The legislator may do "log-rolling"—but he doth not "clear land." If he meddle with your furnaces—will he be sure to keep out of the fire? If he assume to be your patron—is it not the servant patronising the master? If he will meddle with the manufacturer of cloth, had he not better cut your coat also? If he will bind trade by law—ought he not himself to be "bound to a trade?" When he interferes with lawful business, it is our business to interfere with him—but if he will keep the peace toward us, we will toward him, and thus will we

endeavour to establish a treaty of friendship and alliance between human rights and human legislation.*

(*To be concluded in next Number.*)

II. *Abstract of some portions of a Paper on the Sense of Resistance and Faculty of Force, read by Mr Simpson to the Phrenological Association, met in London, 4th June 1841.*

In a former Number (vol. xii. p. 212), the discussion of this subject in our pages was declared to be at an end, unless the evidence of fact could be brought to bear upon it. As Mr Simpson considers the fact that the nerve communicating with the muscle which moves the eye *ends in that muscle*, to be of the nature of new evidence, we willingly allow a place to his

* The following remarks of a distinguished American Statesman upon a kindred subject are very much to my purpose: "The man of all others who has the deepest interest in a sound currency, and who suffers most by mischievous legislation in money matters, is the man who earns his daily bread by his daily toil. A depreciated currency, sudden changes in prices, paper-money falling between morning and noon, and falling still lower between noon and night—these things constitute the very harvest-time of speculators, and of the whole race of those who are at once idle and crafty; and of that other race, too, the Catilines of all times, marked so as to be known for ever by one stroke of the historian's pen, *men greedy of other men's property and prodigal of their own*. Capitalists, too, may outlive such times. They may either prey on the earnings of labour by their tent. per cent., or they may hoard. But the labouring man, what can he hoard? Preying on nobody, he becomes the prey of all. His property is in his hands. His reliance, his fund, his productive freehold, his all, is his labour. Whether he work on his small capital, or on others', his living is still earned by his industry; and when the money of the country becomes depreciated and debased, whether it be adulterated coin or paper without credit, that industry is robbed of its reward. He then labours for a country whose laws cheat him out of his bread.

"The herd of hungry wolves who live on other men's earnings will rejoice in such a state of things. A system which absorbs into their pockets the fruits of other men's industry is the very system for them. A government that produces or countenances uncertainty, fluctuations, violent risings and fallings in prices, and finally, paper-money, is a government exactly after their own hearts. Hence these men are always for change. They will never let well enough alone. A condition of public affairs in which property is safe, industry certain of its reward, and every man secure in his hard-earned gains, is no paradise for them. Give them just the reverse of this state of things; bring on change, and change after change; let it not be known to-day what will be the value of property to-morrow; let no man be able to say whether the money in his pockets at night will be money or worthless rags in the morning, and depress labour till double work shall earn but half a living—give them this state of things, and you give them the consummation of their earthly bliss."—*Webster's Speeches*, 311.

This class of men flourished in the city of New-York just after the failures of 1837. The Directory, moreover, exhibited the names of sundry men who described themselves as "*Speculators*;" this was their pursuit. Some of these were professedly *pious* men—but in reality belonged to that class of men whom some wit has detected in saying "*Let us prey.*"

application of that fact to his theory. The report here given is abridged from the *Lancet* of 17th July 1841.

The object of his paper, he said, was to strengthen the evidence, which he had detailed in several papers in the *Phrenological Journal*, (see vols. ii. 412; iv. 266, 314; ix. 193*) and read to the Phrenological Societies of London and Edinburgh, for the conclusion that mechanical resistance is the object of a special sense, which may be called the *muscular sense*; having the whole muscular frame as the external organ, from which the sensation is conveyed by the nervous system to the brain.

On reflection, Mr Simpson thinks that the sense of *Resistance*, as the thing felt, is a more philosophical term; it is more analogous to the other senses. For the sake of such of his hearers as had not read his previous papers, or had forgotten them, Mr S. stated that he had speculated on the subject for upwards of seventeen years, since he first read upon it to the Phrenological Society of Edinburgh, when his attention was addressed to the organ called *Weight*, which, he then thought, he saw reason for concluding to be the organ of that instinctive perception of equilibrium, which is essential to the exertion of animal power; of that instinct which enables animals to place their bodies in accordance with the laws of gravitation and mechanical resistance in general; in order to walk, stand, run, swim, and fly. A wide field of knowledge, including a great multitude of phenomena, was made clear by this truth. Mr S. brought many interesting illustrations from diseased manifestations of the power in question. Among the rest the case of Mr John Hunter the anatomist, who sometimes felt as if suspended in the air, whirling round, sinking down, as if perpendiculars were inclined, "he not receiving," as he expressed it, "from his own feelings, information respecting his centre of gravity." The sensation of falling millions of miles, described by the English Opium-eater, was also diseased sensation of resistance, which is another word for support. Mr S. adduced some other curious examples of morbid action.† Finding the organ of *Weight* large in engineers, mechanics, billiard-players, bowlers, archers, &c., Mr S. at first thought that nothing else was necessary than this organ, both for resistance and counter-resistance. It was not till Sir Charles Bell read to the Royal Society in London a

* We here continue the reference formerly given in a foot-note in volume ix. page 193, of the papers on the subject contributed to this *Journal*:—vol. ix. 193, 349; x. 525, 535, 730; xi. 275; xii. 206; xiv. 109. Every writer on a subject like this, the evidence of which is progressive, should make reference to the writers who have preceded him. Recent converts are apt to take up phrenological points, on which much often has been written before, as if they were new in their own hands.

† The sufferer under the "Midnight Enemy," as he calls a horrible fit of nightmare, had the sensation of *falling*.—See *Chambers's Journal*, No. 508.

paper (Transactions, vol. cxvi. p. 163), describing his discovery of a double nervous apparatus, or circle of nerves connected with the muscles, the one nerve conveying to the brain information of the state of the muscle, and the other bringing back the adequate nervous influence to control, guide, and move it, that Mr S. began to think that two faculties are engaged in this operation: the one a *passive sense* for feeling mechanical resistance, the other an active faculty for *applying* counter-resistance; the *sensitive* nerve serving the one, the *motor* nerve obeying the other. Mr S. had been asked to define a *sense*, as distinguished from any other perception. He considered it enough to distinguish their instruments, not their characters. That perception is a sensation, which is occasioned by a material object acting upon an external bodily part, and thence affecting an organ in the brain, by a *nervous* communication. Such are the five senses. The resistance sense is of the same description. On the other hand, such perceptions as Form, Size, &c., have cerebral but no external organs, like the senses. Sir C. Bell had discovered that two nerves, having distinct origins or roots, passed into one sheath for the supply of the muscles; and disease had shewn that the sensitive power and the motor power might be respectively and separately suspended. He further shewed that the sensitive nerve passed forward to the skin, and *there* constituted the channel of the sensations of pain, and heat and cold, which are quite different from resistance to the muscles. There was considerable doubt as to whether these nerves supplying the skin were identical with, or distinct from, the nerves which informed the brain of the state of the muscle; but this doubt seems removed by the case of the muscle called the *motor oculi*, which is supplied with a nerve *purely muscular*, giving the sensation of the state of the muscle, but not proceeding to and spreading out in the skin.

Sir Charles Bell read a paper recently to the Royal Society of Edinburgh (Transactions, vol. xiv., Part I., p. 226), in which he says—"We come next to the *third nerve*. This nerve is distinguished from all others; its origin is peculiar, and *its distribution limited*. By universal consent, it has got the name of *motor oculi*, being distributed to the voluntary muscles of the eye, and to none others; so that it directs the axis of the eye in vision, both controlling the muscles, and having the farther property of conveying to the mind the impression of the condition of the muscles. I entertain this idea, because it is a double nerve.

"*Its Origin*.—Our best authors describe this nerve as arising from the *crus cerebri*, and so it does, above all the intricacies of the nervous system; it does not enter into the

mixture of originating filaments in the *pons* or *nodus* ; it does not communicate with the decussation in the *medulla oblongata* ; it is in direct communication with the brain.

"As I have already shewn that the *crus cerebri* consists of two columns—one of motion, the other of sensation, and that the *corpus nigrum* divides these columns : if a section be made of the *crus* just anterior to the origin of the third nerve, we shall find that we cut through the *corpus nigrum*. And now if we take the curette and gently divide the two columns, and so separate them in the direction towards the root of the nerve, we shall divide or split it ; shewing that part of it arises from the anterior column, and part of it from the posterior column. If we carefully dissect and lay out the third nerve, we have a very interesting view as illustrative of its function, and of the nervous system. The roots as they arise, and for some way in their course, are in round distinct cords, running parallel to each other ; they then join together, and form a dense body, in which the filaments are separated, rejoin, and are matted together ; after which their progress is as a common nerve. Their distinct origin from the division of the *crus*—the two distinct fasciculi of parallel fibres—the course of these for some way without exchange of filaments, and then afterwards running into intimate union, are circumstances of much interest, as shewing the distinction of the *crus cerebri*, the distinct nature of the roots of the third nerve, and that it is a double nerve dedicated to the finer motions of the eye, peculiar in its structure, and yet in conformity with the system which I have followed.

"A question is naturally suggested here. Is the third nerve a *sensitive* as well as a motor nerve ; and if so, how comes it that there is no regular ganglion on the root which it receives from the sensitive column ? This would incline me to believe, that the ganglionic root is an organization on the spinal nerves and fifth pair, suited to that sensibility which the body universally, and the *surface* especially, enjoys, which gives pain, and becomes a guard upon the frame.

"At the same time, it will not be overlooked that the texture of the nerve at the union of the fasciculated roots very much resembles the texture of the spinal ganglion. The difference may be reasonably attributed to the distinction in office ; *i. e.*, that it has no reference to the sensibility of the surface, but only to the condition of the muscle.

"The very peculiar and unique position of the roots of this third nerve, whilst it places the function of volition directly in communication with the sensorium, and unembarrassed by communication with other nerves, has also this superior advantage, that it is in direct relation to the sensitive column.

This connection, as I have just said, has no reference to common sensation ; *for the nerve is strictly limited to the muscles, but only to that property of estimating the condition of muscular activity.*"

The extent of Sir C. Bell's discovery, in other words, that he has discovered a nerve, the servant of the muscular sense, distinct from the common sensitive nerve, has been disputed. Mr Simpson held, that the case of the nerve subserving the *motor oculi* is conclusive in his favour ; that there is a muscular nerve, and a *sense* of the state of the muscle ; and, seeing that it can only be some kind of resistance which operates on the muscular sense, resistance must be the object of that sense.

But if this were all, we should be left with a mere passive sense, which would be of no use to us, and we should perish. We have something to *do* as well as to feel, and therefore must possess an *active power* as well as a *passive sense*. The latter would never move our muscles ; so that there must be a voluntary positive act, and a *motor* nerve as its instrument. The conclusion seems unavoidable, that, in every change produced by an act of the will, through the instrumentality of the motor nerves, on the state or condition of even the minutest of above four hundred muscles, with which the human body is furnished, two distinct functions are exercised, two separate operations performed. The *muscular sense* does its specific duty, and reports *inwards* to the brain the *state* of the muscle, whether in repose or tension, and in what degree of tension ; subsequently, although instantaneously, the *faculty of muscular adaptation*, or voluntary motion, performs its part, and with the most perfect calculation of the degree of counter-resistance, changes the degree of contraction ; in other words, the state of the muscles.

The knowledge of resistance being acquired from gravitation and impenetrability, and of force from the instinct of muscular counter-resistance, the combined effect, probably as the result of experience, is much more extensive than the regulation of our muscular movements. We can perceive the mechanical relations of external matter to external matter, and provide for our safety and increase our power by taking advantage of these relations. We find the different relative powers of resistance, called their density, in different kinds of matter ; and, availing ourselves of this knowledge, and exercising another faculty, namely, Constructiveness which manually fashions, forms, and constructs, we make tools and instruments ; hence we know and prize iron as the most valuable of metals, and form the axe, the chisel, the knife, and the saw.

The mechanical powers, in their rudest state, are applied instinctively, in other words, under the impulse of the faculty in question.

A more extensive and accurate induction of facts than yet achieved is necessary for the localizing of the organ of the faculty for counter-resisting resistance,—the application of force. Mr Hytche (*Phrenological Journal*, vol. xiv.) has added considerably to the proofs that Weight is the organ. Mr Richard Edmondson, of Manchester, in two papers contributed to the *Phrenological Journal* (vol. vii. p. 106, and ix. p. 142), has endeavoured to shew that the organ hitherto called *Constructiveness* is that organ; and that what has been called *Weight*, is “the perception of the position of objects relative to their centre of gravity;” in other words, the perception of the direction of gravitation,—the perpendicular. The preponderance of evidence, however, is in favour of the organ called Weight, from its being found invariably large in engineers and mechanics, while Constructiveness is not always found to be so. Constructiveness is a power merely to *change forms*—to “*rear still fabrics*,” as Mr Combe has called them, but not to combine, or apply, working machinery. But all animals apply the working machinery of their bodies, while a few only construct. No doubt force is applied in constructing the stillest fabric; but that is only saying that both powers are necessary. Mr Edmondson’s theory of the vertical is a valuable suggestion. The passive sense of gravitation will not give us a perception of its direction. This last requires a special and different percipient power for its cognition. The “midnight enemy” already alluded to, *sloped* his victim’s bed. A standard for the vertical seems necessary to our safety, to our perception of what we call *up and down* on a revolving globe, and to the precision of all our movements; and a nice perception of it seems necessary to the just application of force: so that it is quite conceivable that the same faculty perceives the vertical, and applies force or works machinery in its due degree.

In the discussion which followed Mr Simpson’s paper, no objections were stated to his conclusion, that man and animals have a *sense* for resistance and a *faculty* for applying force. Dr Caldwell, of America, spoke at some length upon the subject, giving it as his opinion that that twofold truth had been demonstrated.

III. *Remarks on the Nature and Causes of Insanity.* In a Letter to the late Dr Mackintosh, by Dr A. COMBE.

In the summer of 1830, the late Dr Mackintosh, when preparing a new edition of his work on the Practice of Physic, wrote to Dr Combe, stating that he had of late been devoting some attention to phrenology, and become so much impressed with the importance of its application to the treatment of insanity, that he was very desirous of introducing into his work a short and accurate abstract of the views entertained on the subject by the phrenologist; but that, from his want of familiarity with the details, he felt himself unable to do so in a satisfactory manner, and begged that Dr Combe would furnish him with a chapter on that subject. The subjoined letter was written by Dr Combe in consequence of this request; and as many of our readers may be willing to see the general doctrine of insanity unfolded within a brief compass, we present the letter to them in its original form, merely premising that it was not written for publication :—

EDINBURGH, 21st June 1830.

MY DEAR SIR,—I find it more difficult than I expected to comply with your request of either adding my remarks to your article on Insanity, or of writing a new one altogether; and, therefore, will rather give you a general notion of the phrenological view of the subject, and leave your own sagacity to make what use of it you can.

First, Insanity is not a specific disease, but a symptom of disordered action in the brain or organ of the mind; and, like every other disorder of function, it may proceed from a variety of different states. The delirium of fever is one form of disordered mind, which is always viewed as a symptom; and so ought all other forms to be. The brain being to the mind what the eye is to vision, it follows that, just as vision is deranged by many pathological states of its organ,—such as ophthalmia, iritis, cataract, &c.—so may the mind be deranged by many states of the brain. The sufferers on the Medusa's raft became mad from starvation and exposure, while many become so from excess, particularly in stimulants. The asylum at Milan is filled by lunatics from bad feeding, who almost all recover by nourishing food; while Bayle at Charenton finds many cases arise from chronic meningitis, and Broussais declares that, in the early stages, it is so obviously from inflammatory excitement, that it may often be cut short by free

leeching, as certainly as pleurisy is by blood-letting. Hence it is not the same disease in all.

Secondly, Insanity, being a symptom of morbid action in the brain, springs naturally from causes affecting its health; and hence a great affinity between the causes of acute cerebral disease and of those more chronic affections on which insanity depends. The *hereditary* tendency depends on a peculiarity of nervous constitution, and is of primary importance. *Excess* of some mental qualities, leading to eccentricity, predisposes in irritable constitutions, from the high action into which the corresponding predominant organs are thrown, and hence the latter are generally those whose manifestations are deranged, as proved in Dublin by my brother having, in so many instances, pointed out correctly, *from development*, the probable form of the mental affection. Other predisposing causes, such as age, sex, profession, &c., are referrible to the same principle.

Thirdly, The *exciting* causes are *whatever disorders the action of the brain*. That organ requires regular exercise for its health and preservation, and for the improvement of its functions, just as other parts do—as the muscles in fencing or dancing. Practice in the latter instances increases nutrition, and consequently power; and it gives a facility of combination to produce a given end. The same organic laws preside over the brain; consequently, *excess* of exercise, as in intemperate study, excitement of passion, anxiety, and strong mental exertion long sustained, leads to morbid cerebral action, with derangement of function in irritable subjects. *Deficiency* of exercise, or idleness, leads equally to diseased action and manifestation, as exemplified in the melancholy and ennui of the retired merchant or soldier, and in the numerous victims in the unoccupied classes of society. Local causes act by disordering the brain. Blows on the head, *coups du soleil*, intense cold, drunkenness, meningitis, &c. shew this.

Fourthly, Dyspepsia, and other disorders of the abdominal viscera, excite it secondarily in some instances in *predisposed* subjects; but, in general, mental causes have preceded. The same remark applies in nymphomania and erotomania, in which the affection of the generative organs is generally the effect, and not the cause, of the cerebral disturbance. The brain, in short, is more frequently disordered by direct than by indirect causes; and, in this respect, the analogy between it and other organised parts is preserved.

Fifthly, The *symptoms* indicative of insanity consist of deranged cerebral functions and local phenomena. Every sense, every nervous function, and every faculty of the mind, may be involved in the disease or not; and hence indescribable variety.

The *true standard is the patient's own natural character*, and not that of the physician or of philosophy. A person from excess of development in one part of the brain may be eccentric and singular in his mental manifestations, and yet his mental health be entire. Before we can say that he is mad, we must be able to shew a departure from his *habitual* state which he is incapable of controlling. An irascible man may be very boisterous without being mad; but if a mild and timid creature become equally boisterous and irascible, we may apprehend disease. One may be *naturally* suspicious, jealous, and cunning, without being insane; but if a man of an open, generous, and unsuspecting nature become so, danger to his cerebral health is at hand. The derangement may be either an excitement of the patient's predominant qualities, or a diminished action, or a perversion or vitiation of function. A proud man may, for instance, become a king during disease, from *excitement* of function; he may humble himself in the dust as unworthy to walk upright, from its *diminution*; or he may fancy himself something out of the ordinary course of nature from its *vitiation*: or one who is attached to friends when in health, may either have inordinate love for them when insane, or be indifferent, or have a hatred and aversion to them; and so on with every feeling and faculty of the mind.

The co-existence of digestive derangement modifies the mental state, and gives greater anxiety and irritability than where the stomach, liver, and bowels act well. Other complications modify in other ways.

Monomania, religious, erotic, and other manias, are not different diseases. One organ and faculty being chiefly affected, and the rest entire, gives rise to monomania; but the proximate cause may be, and often is, the same as where all the organs and faculties are affected. Religious despondency is the mere symptom also, and appears because the function of some cerebral parts is to manifest religious feelings; and those being diseased, the function necessarily suffers, and the feeling is altered. But the *same* pathological state affecting Combativeness and Destructiveness would produce furious mania.

Monomania and melancholy are less easily curable, not from the proximate cause being more serious, but partly from the other faculties succeeding in longer concealing the existence of aberration; whereas in mania it betrays itself early in spite of the patient.

Insanity is not a state separated by a broad line from sound mind. Every gradation is observable, and we perceive morbid action before we can venture to say that the patient is insane. Some are cured at home of mental affections in a few weeks,

who, if sent to an asylum, would become mad, and remain so for months or years.

Besides what you notice in regard to treatment, every thing demonstrates that *employment* to the patients is not sufficiently studied. The brain loses its health from vacuity of mind, and yet we shut up in scores in perfect idleness, men who, when well, were accustomed to an active and bustling life, and whom, at any time of their lives, idleness would have driven mad. Manual labour and occupation are of immense consequence, and the moral influence of keepers and superintendents acquainted with human nature, and interested in their vocation, is prodigious in producing quietude, and accelerating recovery, just from giving to the brain that healthy exercise which it requires. Lunatics retain a good deal of reason even in their worst condition, and hence are more accessible to the influence of reason and example than might be supposed. In every point of view it is best to act towards them with the same consistency, honesty, and good feeling, as if they were quite in possession of themselves. They are quick in detecting deceit, and, when once deceived, never give confidence again. I mention this, because I differ from what — once said to you on this subject, in having flattered and led D—— by his predominating self-esteem, and from what you said in accordance with it. My experience says, Never advance a word which you cannot conscientiously stick by when the patient recovers, and you will retain your ascendancy. Do not thwart his delusion, but neither give it any countenance. — is now satisfied I am right in this. Remove all provocatives and allusions to the morbid feeling or idea, and exercise the faculties which remain sound.

In subjects not delicate, and not beyond middle life, I find many who are greatly benefited by occasional leeching, followed by tepid bathing, and cold to the head while in the bath. Many, of course, do not require depletion; but it may be advantageously employed when the usual indications exist. General bleeding I know little of, and do not like. After the irritability and excitement of the immediate explosion are over, a *great deal* of exercise in the open air seems most useful in diminishing irritability, relieving the head, and procuring *sound* sleep; but if used too soon, it injures. The ordinary principles of pathology ought, in short, to regulate medical treatment, and adapt it to the state of the *individual* patient, for the latter is the only safe and successful plan. I remain, &c.

A. C.

IV. *On the Establishment of an Asylum for Patients recovered after attempts at Suicide.* By W. A. F. BROWNE, M.D., Physician to the Crichton Institution for the Insane at Dumfries.

No one who reads the public papers from barren curiosity, or to catch the moral characteristics of the time, can shut out a conviction of the frightful increase of suicide meditated, attempted, and effected. I have for years consulted the registers of these events for purposes which it is not necessary to particularise, but which have led me to view the subject in various aspects ; to regret that the frequency of such events, and the publicity given to them, often imparts to the suicidal disposition an epidemic or imitative character ; to deplore the polluting and sanguinary tone such disclosures tend to communicate to the public mind ; but, above all, that so little interest is excited in, or displayed towards, the unfortunate objects of these horror-inspiring narratives, that neither the pietist nor the political economist direct their attention to reclaim such individuals as have been saved from their own rashness, and that no interference is ever conceived necessary to prevent a repetition of the act.

We may daily observe it stated in the public papers, that persons who have been prevented from the commission of suicide are, immediately after their recovery from the effects of the attempt, set at liberty, and allowed to return to their friends and home. This is a very questionable humanity. It is, in effect, to deliver these unfortunate beings a prey to their shame, or sorrow, or madness ; to the very motives of the act which they have meditated, and may still meditate ; and to these aggravated, as they must be, by exposure and obloquy. A man jumps over London Bridge, and if saved by the exertions of a waterman, he is allowed to walk away to Westminster Bridge, or the Serpentine, or some other convenient spot, to seek death anew, undisturbed by the officious and humane. The saviour of such a person can have no guarantee that the object of his care will profit by his interference, will not rather rush on that fate which has for a moment been averted. It cannot be supposed that a trustworthy guarantee will be found in the promises, or penitence, or fears of the suicide himself. Individuals under such circumstances cannot be regarded as altogether responsible, or be expected to understand so clearly the situation in which they have been, and are, as to resume at once those modes of thinking and feeling on which dependence can be placed, and in which the safety of the miserable

who, if sent to an asylum, would become mad, and remain so for months or years.

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beings consists. Assuredly, they are neither trustworthy nor rational, and yet it is doubtful whether they can be treated as insane. The law forbids that they should be confined and protected from themselves in an asylum, however appropriate such a retreat may appear for their condition, and however closely connected that condition, when analyzed, may be found to be with mental derangement.

But humanity still more imperatively forbids that they should be abandoned, lost sight of, and cast back upon their own resources—friendless, homeless, hopeless. A few may rejoice that they have been snatched from a premature death, or a wicked and inexpiable action; a few may feel as healthy hearts ought to feel in such an emergency; but the great majority lapse into their original state, or pause in their career of self-immolation, solely because they have not, and only until they have, a fitting opportunity to carry a settled purpose into execution, or to gratify a predominating impulse.

For such individuals, I would humbly suggest to the philanthropic and those in authority, that some temporary asylum should be provided.

A curious case, reported recently in the Times, shews that there is legally a right in the sane to prevent, even by imprisonment, the suicidal from endangering their lives. A young woman is seduced; obtains admission into a workhouse as an ailing and starving lad; is afterwards sent to jail for an alleged act of vagrancy, where her sex is discovered; and when about to be discharged on the expiring of the penal period, declares her intention to destroy herself, is carried before a magistrate, where she again acknowledges that such is her intention, and is most humanely and wisely sent back to prison.

Could not some asylum be devised, if for nothing more, at least for the reception of this class of persons during what may be called their paroxysm, and until they can be united to their friends or guardians, and until all immediate danger had passed. But I conceive that the objects of such an establishment should be higher: medical treatment might be resorted to; the consolations of religion afforded; adverse circumstances relieved; and, in fact, all measures adopted which are calculated to preserve the individual, and to induce a healthier state of mind.

Were the suicidal disposition invariably, as it sometimes is, a transitory condition; were it not, as it generally is, the result of a permanent aberration of mind; such carelessness of the lives and interests of the unfortunate victims of such a propensity, as at present exists, might in some degree be justifiable. But there are men who for years and years harbour

such a resolution ; who are protected so far from their own designs within the walls of an asylum ; whose purpose is known ; whose cunning is circumvented ; whose stratagems are defeated ; who yet, notwithstanding all vigilance and precaution, destroy themselves.

From the history of men who have at last fallen by their own hand, it may be learned that many such cases exist in society ; where preparations have been long made for such an event, and where the act is more the sequence of cool determination and of fixed and habitual purpose, than of sudden impulse. For individuals who cherish and attempt to execute such a design, but whose deportment is otherwise rational, a retreat should be provided, until friends or guardians can be apprised of their situation, and undertake their safe keeping, and to protect the feelings of the public from further outrage. For those who are influenced by a momentary despair, by misfortune, or by any temporary causes, a similar retreat is indispensable, until the excited or morbid feelings subside ; until the sources of irritation and distress are removed or mitigated ; or until measures can be taken by friends or the authorities to meet these. Suicides from intoxication, poverty, seduction, and various other causes, might thus be saved, and placed in a favourable position for the return of reason, penitence, peace, and happiness.

I am neither prepared, nor am I presumptuous enough, to offer any suggestions as to the details of such a proposal ; but when it appears that about one-fifth of the time of the public coroner is occupied by cases of suicide, the most humble individual is justified in recommending any expedient by means of which the mortality from this cause may be diminished, and the lives and reason of the most unfortunate of our fellow-men may be preserved.—(*Lancet.*)

V. *Thoughts and Observations on Phrenological Subjects.* By an English Traveller in Italy.

TO THE EDITOR OF THE PHRENOLOGICAL JOURNAL.

SIR,

Florence, November 30. 1841.

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I BELIEVE I have the honour of being a member of the London Association, having, according to its printed form, received no notice to the contrary.

I was once a decided opponent of phrenology, and employed all the usual arguments against it, till by accident was

shewn me the printed answer to all my supposed invincible arguments, which convinced me they were but smoke. I then gave up all reasoning on the subject, and determined to listen, and to seek only facts and not theories.—The difference of the heads of the horses that had gone through my hands (as a young sportsman, but which pursuit I have now long given up), and the endless differences of their characters, were facts that struck me; but more still was I surprised on recollecting that I never had a greyhound with a flat broad head, that I could by any means cure of tearing, if not eating, the hares, whilst those with a narrow head and high arched forehead never did so; and in two cases I had of the latter, the dogs untaught would bring me back the hare untorn half a mile, if unmolested by another dog, and would even run away with her as if to save her. I have often known them bring me back the hare alive, and sometimes unhurt, from some distance, so gently had she been carried. Similar cases of such different characters in animals are well known to most sportsmen, though they never trouble themselves about the cause. If men would look to facts instead of theories on a subject on which facts are so plentiful as in phrenology, I think all men, unless they have bad heads themselves, would be phrenologists, or at least believers in it. I have never known a man with a bad head admit fully the truth of phrenology.

The state of the science here in Tuscany is very low indeed. I am told that the only person who tried to introduce it was a medical man, who, finding the use of it in his practice, taught it to his pupils, but received a reprimand for so doing from the authorities. Of course, had he persisted, he would have been exiled.*

I have made here several converts; but books, casts, or marked heads, are not to be procured in the town. Through Prince Corsini I applied to his brother, "the Minister for the Interior," for permission to make a phrenological visit to the prisons, &c. here. My request was granted, but the head of the police had first to be spoken to by the minister. A few days afterwards I received a message to the effect "that they would have much pleasure in conducting me through the prisons, but that I was recommended not to touch a prisoner's head, or even to ask one to take his hat off, as it was feared that such a thing might cause a very great and unpleasant disturbance in the prison, by making the prisoners fancy they were being made the subject of some magical process, or else

* Our correspondent here refers, we presume, to Professor Uccelli, who was actually expelled from his chair for advocating phrenology. The particulars will be found in our 14th volume, p. 128.—EDITOR.

that I examined their heads to find some excuse for cutting them off." I then proposed a private examination of each separately, and to pay each prisoner; but it was evident that the gentleman who kindly brought me the message, felt or was aware that the authorities did not wish to sanction a phrenological experiment; and therefore, as I did not see the use of beholding the wretchedness of a foreign prison, I returned thanks, but declined. I am, however, resolved to visit the madhouse and galley-slaves at Leghorn before I leave Italy, and most likely I shall succeed in getting some valuable casts, in which case I shall have much pleasure in presenting them to the Association. I have met with some good cases since I have been abroad, and I think them worth mentioning. At Venice, my Italian master had a most cringing gait on entering the room, and I felt no difficulty in placing it to the account of a small Self-Esteem. I was right; he had a great flatness in that region. On arriving here, I met with a young lady, whose case (at first sight it appears just the contrary) is a good one, and gave me a valuable lesson in the science. Before I proceed, allow me to remark what appears to me a strange mixture made by Dr Macnish, Mr Deville, &c. of the organs of Self-Esteem and Love of Approbation. I have only a French copy of Macnish by me, which I must translate. Under the head of Self-Esteem is the following question: "Describe to me some of the forms under which this organ shews itself?" Answer: "It engenders the love of place, honours, dignities, &c." This, I fancy, is an error, and is confounding Self-Esteem with Love of Approbation; for the very essence of the latter organ is to desire honours and praise, whilst the former is to value one's self with or without them. If Self-Esteem is diseased, we think ourselves kings, &c.; and if only predominant, we think ourselves as good as one;—but, if we wish to be one, it must be the action of Love of Approbation, which would furnish ample cause for the effect, whilst Self-Esteem would furnish none * Deville, pages 74 and 75, makes the same error in saying it causes ostentation. I had also got the idea from some of my books left in England (I think G. Combe's Phrenology), that the frequent use of the pronouns *I*, *me*, *my*, &c. was demonstrative of Self-Esteem; and so strongly was I impressed with

* Dr Macnish's own words are:—"It displays itself in a fondness for being placed in dignified situations, as on the magisterial bench." Self-Esteem gives the love of authority and homage, and consequently of situations by which power is conferred. Such situations may, however, be desired also by Love of Approbation, on account of the reputation and *état* annexed to them. In studying phrenology, it is important to attend not merely to *conduct*, but to the *motive* from which it springs.—EDITOR.

it, that I was led into error. The speech in Douglas, "My name is Norval," &c., I took to be born of Self-Esteem; but a moment's thought will give it to Love of Approbation: for why mention his deeds if he cared not to be praised for them? I have come, for the present, to this conclusion,—that the excessive use of these pronouns is the natural language of either Self-Esteem or Love of Approbation, according as they are used. The following are examples: "These are not *my* views. *I* think these things are little understood by the world in general. *My* ideas are founded on the experience *I* have had, and which *I* conceive of some weight. *My* family have been in the habit of residing in the country, and, on account of *our* political opinions, *I* have been drawn into collision with *my* neighbours." Is not this Self-Esteem? Not one word to draw forth praise or ask for approbation—no boasting—only a relation of facts, in which it is plain the speaker thinks he stands high in the estimation of all, and that he would think a person as foolish for telling him he was great or clever, as he would so consider one who told him the sun and not the moon shines in the day-time. Were Love of Approbation also as large, or larger, it would not be disagreeable to be *toad-eaten*, particularly if Causality and Conscientiousness were not equally large. Now for a sample of the other way of using the egotistical pronouns: "Indeed *I* think you are right, and *I* will give you a case in point. *My* father was a man of large fortune, and courted by every one, and though *I* was a child at the time, *I* remember it well; *our* house was elegant, and *we* lived in the first style. Prince X—, a most particular friend of *ours*, and who paid *me* the greatest attention, came often to see *us*. *I* liked him very well, but my parents said they had better views for *me*. Well, he told me *I* had got a most classical head. Indeed, no one has received more compliments than *I* have, but *I* have never felt elated by it, so you cannot call *me* conceited. *I* know *myself* thoroughly, so you need not fear making *me* vain. How is it, when *I* go to a ball *I* always get the greatest attention paid *me*, but *I* never think the better of *myself* for it. *I* am sure *I* must have something very odd in my head." Is not this sample very different from the other? * I will now return to the young

* The conclusions of our correspondent have been anticipated by Mr Combe, in whose System of Phrenology, pp. 291 and 307, the following remarks occur:—"When Self-esteem predominates, it gives an intense feeling of egotism; there is a proneness to use the emphatic *I*: *I* did this—*I* said the other thing."—"Love of Approbation excites the individual to talk of himself, his affairs and connections, so as to communicate to the auditor vast

lady. From the appearance of the head at the side, I had no doubt of there existing a large Self-Esteem, and I was confirmed in this idea by the continual use of the pronouns (but used as in my second example), by her making herself always the subject of conversation, and by her gait, which was very upright, with the head inclining backwards, and an air of being quite at ease in any company. On getting better acquainted with her, I was puzzled to find how amiable she was, the trouble she would take to serve and to be agreeable to her friends. She never mentioned a prince, or even a queen, without the addition of, "were so kind to *us* and were often at *our* house." She told me "the custom-houses never troubled them, for they always travelled in such style that they were always taken for ambassadors." Having what the world calls a fine figure (meaning like an inverted wine-glass), she told me "she was a great admirer of female beauty, but never pretended to judge of below the chin." I instantly asked her opinion of the Venus de Medicis, and she replied that "she thought she would look very stout and unshapely if dressed for a ball." I need hardly say my impression was she thought herself the standard of perfection. Added to this, she appeared to be regardless of her dress, unless on particular occasions; wearing often a torn old moth-eaten shawl, which one would not pick up in the street, &c., though she is well off, if not rich; which I have always considered rather a sign of Self-Esteem, as it shews some disregard to the opinion of others, and a degree of independence. The predominant temperament is sanguine; age called 20; education good; and the lady has been much in society. The head is decidedly good, and Eventuality the largest intellectual organ. The line is long before the ear, and behind to Self-Esteem. The moral region is good. The peculiar feature of the head is the length from Eventuality to Self-Esteem. Both Firmness and Conscientiousness must be considered well developed organs, on account of the good quantity of brain above Caution. Language is very good, and she is an excellent linguist, speaking fairly French, German, Italian, and English, the last being her native tongue. She talks very much, and is full of detail of events of her own and other family occurrences, generally about great people. She is also fond of children, and likes marvellous stories, but is not in the least religious. She believes her father has seen a bogie, "or at least," she says, "he must have seen some-

ideas of his greatness or goodness; in short, vanity is one form of its abuse. . . . It, as well as Self-esteem, prompts to the use of the first person; but its tone is that of courteous solicitation, while the *I* of Self-esteem is presumptuous and full of pretension."—EDITOR.

thing." She tells many wonderful tales, and I cannot be sure whether she believes them or not. She has not the least bashfulness under any circumstances. Whenever I have found this latter feeling strong (and some people have so much of it that they blush like scarlet on being introduced to a stranger, or make some hideous face, between a smile and a cry, on entering a room full of company), the organs of Self-Esteem, Love of Approbation, and Caution have always been large, and all these faculties much marked in the character. Modesty and bashfulness are two very different things. The former is the absence of a great Self-Esteem, but the latter is the contention of the organs above named.

Moderately modest I now think she is, but bashful certainly not, for she would make a speech, I think, with all the world looking at her. I was puzzled. I studied night and day this apparent contradiction to Phrenology, but could not satisfy myself on the point; for I felt no doubt of the great size of Self-Esteem, or of her great desire to please. She asked me one day what was the meaning of a fissure she had in the back of her head. I asked to feel it, for it was concealed by the hair. Guess my surprise and delight in finding Self-Esteem buried between two hills of Love of Approbation, just like the Firmness of Mrs H., only not *quite* so big nor so much space between the two large organs.* Here was the secret out. I had expected to find most cases of large Love of Approbation more like Donovan's Amateur Actor, but here it bore the appearance to the eye of a large Self-Esteem; the hand, however, soon revealed the truth. I then had to account for the bold upright gait, which I laid at once to very full Combativeness, Destructiveness, and Firmness, to the absence of a large Caution, to a good intellect and education, and to her being an only child and having seen much of society. Besides, in spite of the great predominance of Love of Approbation, I do not think I should say Self-Esteem is deficient; for set aside the undue prominence of Love of Approbation, and you would then say Self-Esteem is very full; the occipital-coronal quarter of the head would still be rather large, forming an ample convexity with Firmness, Conscientiousness, Caution, &c., and there would be a long line from the ear to the centre of the cavity of Self-Esteem.

* This description leads us to suspect that our correspondent has mistaken a narrow depression, frequently found in the mesial line over the longitudinal sinus, and separating the two organs of Self-esteem, for a depression of the organs themselves. We have seen cases where large organs of Self-esteem were divided from each other by such a furrow. Judging from our correspondent's description of the lady's character, we think she must have a very comfortable endowment of the feeling in question.—EDITOR.

Since writing the above I have had a regular manipulation of the head, which I here give. The terms I use are so many degrees or sizes above or below "full;" and by "full" I mean, about a fair quantity.

5 above full...	Love of Approbation.
2 above full...	Self-Esteem, Combativeness, Conscientiousness, Form, Eventuality, and Language.
1 above full...	Amativeness, Philoprogenitiveness, Adhesiveness, Firmness, Hope, Individuality, Size, Locality, Time, Tune.
Full.....	Destructiveness, Secretiveness, Constructiveness, Caution, Benevolence, Veneration, Imitation, Weight, Colour, Comparison.
1 below full...	Acquisitiveness, Gustativeness, Wonder, Wit, Number, Order, Causality.
2 below full...	Ideality.

The distance from the meatus of the ear, calliper-measurement, to the centre of the cavity of Self-Esteem, is $5\frac{3}{4}$ inches. Conscientiousness is a good organ, and the lady boasts I never knew her utter one false word. Her carelessness of dress is easily accounted for by the moderate size of Ideality, and its being the smallest organ in the head; and this organ I regard as simply giving the wish to *adorn* and to improve, whether it be the person or the language. I am still puzzled at her love for the marvellous, united to her little or no religion. The forehead in the region of Wit, Ideality, and Wonder, is rather confined. I have, since writing the above, discovered a new trait in her character. Though a good-hearted girl, she will speak harshly of those whom she fears *some* may think she would suffer in the comparison with, and she will try to prevent it by abusing them for some imaginary thing in which by comparison she would gain. Thus, she never praises, but picks to pieces, those who are richer or handsomer than herself, or who are titled, *unless* they are out of the country, and she can tell you how fond they were of her, and how familiar they had been; in these circumstances she will extol their beauty, rank, or fortune, to the skies. A very handsome titled lady, of middle age, with a splendid skin, left the room last evening. The door was hardly shut when she said, "Dear me! Is that Lady ——? How very old she is!" &c. &c. She always tells us her hair is exactly the colour of her boa, which is sable, while in reality her hair is red. She will also tell you a story of "how careless she is—how many things she loses—how much her father has paid for them—what great person was with them at the time, and what Princess —— said to her," &c.; and all to give you a great idea of her consequence or wealth. Still, I believe her (without the help of phrenology) to have a good conscientiousness, and I would trust her with any thing; for if ever she does stretch a point,

or use the paint-brush, it is only when the ruling passion for approbation spurs her on. She has great independence of character, and claims praise for it. This is the sort of head, doubtless, which gets its possessors the name of being vain, conceited, proud, malicious, and *ill-natured*; whilst in reality they only pine for your good opinion, and would spare no trouble to serve you.

Her father has a very full Caution and but a moderate Acquisitiveness. He squanders his money, quite regardless of shillings and pence, but lives in such a way as not to be able to spend within a good deal of his income. In doing so he is assisted by his Firmness, the organ of which is large.

I have met with a poor woman with large Language, and on my remarking I thought it likely she was wordy and talked much, I was told she talked incessantly, even to herself, and when quite alone she is often heard talking as if some one were with her.

I have just heard that the Society of Savants, who meet here this year, have offered a prize for the best article on phrenology. Alas! there is not one Italian phrenologist in the town to claim it; nor any other, I believe, but myself.

Should I find, Mr Editor, you consider my article worth making use of in any way, I will furnish you with more matter as I collect it; and in the mean time I remain your obedient servant,

W. M. A.

VI. *Remarks on Dyspepsia as connected with the Mind.* By
A. FLINT, M.D., Buffalo.

A dyspeptic presents himself to a physician and states his sufferings. The physician inquires concerning his habits, mode of life, &c. He ascertains that he has indulged his appetite for food and drink without much discrimination, and at all periods has neglected to take exercise, &c. He exclaims at once, "It is not surprising that you have dyspepsia;" and he recommends him to reform his habits. If the patient follows his advice, perhaps he recovers his previous health without difficulty. Shall we then say that dyspepsia generally arises from dietetic errors? This, probably, is the common doctrine; but I am disposed to doubt its general applicability. How many are there who pursue such a course for a great length of time, perhaps during the whole period of life, without becoming dyspeptic, when, as far as we can judge, there is no reason to suppose their immunity is owing to a better constitution or

stronger power of endurance ! On the other hand, how many with the utmost care and prudence become and continue dyspeptics ! It is not to be inferred that irregularities and intemperance are not common causes of this disease. In the poorer classes, it may, perhaps, generally be attributed to these, conjoined with destitution, bad food, sedentary occupations, close or pernicious atmosphere, exposure, &c. ; in the rich to the abuse of luxuries, with love of ease. But there is a class who do not want the comforts of life, and who do not indulge in luxurious excesses ; and observation shews, that in this class dyspepsia is not only common, but peculiarly obstinate and persistent. This is an important fact in relation to the disease. A poor person, if he be better fed and clothed, his habits and the circumstances about him improved, is restored. A rich man, if he curtails his pleasures, uses more exercise, engages in healthful occupation, may, in general, expect the speedy return of good health and spirits. But the class between these extremes, who are already clothed and fed, who have no excesses to curtail, find, whatever course they may pursue, that to overcome their difficulties, requires not a small degree of care and perseverance. Physical peculiarities of constitution may explain this in some cases, but, in general, it seems to me, that the explanation is to be derived from the connexion of the disease with the mind. This class, it is to be observed, as a general remark, embraces that portion of mankind, who are disposed more or less to occupations or pursuits which involve, in a greater degree than in the other classes, the exercise of the intellect. Dyspepsia, it has been always observed, is more liable to seize upon those who are thus disposed, and two reasons have been assigned for this preference ; viz. 1. The sedentary habits which these pursuits and occupations generally involve ; 2. Reasoning from the well-known sympathy which exists between the brain and stomach, to excessive or disproportionate cerebral exercise. There cannot exist a doubt that the former play an important part in the production of, and predisposition to, the disease ; but with regard to the latter, so far as I am able to judge from my own observations, it is rarely a cause of the disease, excepting in as far as it involves the former. Among literary men, we do not find that they are so liable to the disease who are in the habit of intense, prolonged, or frequently repeated intellectual exertions, although accompanied with much excitement and perturbation, as those whose exertions are of a plodding character ; and these generally seem to suffer in the same way as some artisans, viz. from the deficiency of muscular exercise, the invigoration of the atmosphere, &c. On the other hand, deficiency of intellectual

exertion as a cause of the disease, seems to have escaped observation. I have been led to think that this in certain mental constitutions peculiarly predisposes to dyspepsia. "Mind tends to action," or, to quote the expression of another physiologico-philosopher, exercise or action is a "want" of the intellect. This tendency or want will exist in proportion to the extent of the mind's capacity for exertion, and, like all the instinctive impulses and demands implanted in the human constitution, it must be fulfilled and gratified, or the economy will suffer. If we carefully examine the history of the cases which fall under our observation, we shall find that a large number of them, although in their details or particulars they may differ, are, nevertheless, to be associated, as it regards the causes which have produced and which perpetuate them, under this common principle. Nor is it intended to apply these remarks exclusively to those who are pre-eminently intellectual persons. The mental energy may be expended on other than literary and scientific objects, in the performance of any occupation not wholly mechanical, in the fulfilment of the various responsibilities of life; and its obstruction as it regards the latter may be attended with the same results as in the former case. According to this view, the disease under consideration is consequent to the unnatural condition in which many individuals are placed as it regards the exercise of the various faculties and powers of mind; or, in other words, to a want of correspondence between the mental constitution and extrinsic circumstances. By the term mind, and the expression mental constitution, I would embrace all that appertains to the moral as well as intellectual powers and faculties. My remarks have had more particular reference to the latter; but in many, if not the larger proportion of individuals, the wants of the moral nature, the affections and sentiments, predominate over those which are purely of the intellect, and there is reason to believe that similar results may follow their obstruction or perversions. Indeed, it is probable that instances of the latter are more common than of the former.

It may be said, On the supposition that this explanation of the origin of the disease be correct, why are not its peculiar aberrations the direct effect of causes operating on the mind, without the intervention of the digestive organs? This is not probable, in the first place, from the constancy with which they are associated with derangement more or less of these organs, together with their distinctive traits; and, in the second place, it is not presumed that all cases of dyspepsia originate in this manner. The successive agents, then, in the development of the disease will be threefold:—

1. The operation of the mental causes.
2. The affection of the digestive apparatus.
3. The reaction of the latter upon the mind, producing those mental aberrations which characterize the disease.

From this doctrine is derived a sufficient explanation of a fact which has been mentioned, viz., that dietetic errors are persisted in often with impunity by those whose strength of constitution and powers of endurance are apparently no greater than of those who suffer.

Treatment.—It is well known, that in numerous cases, all the various modes of medical treatment recommended, accomplish but little toward restoring the patient to a healthful condition. The truth is, in the majority of cases, the patience of the physicians is exhausted by the inefficacy of the remedies prescribed; or the patient, after application to different members of the profession, and experimenting with the thousand and one empirical nostrums, relinquishes all expectation of benefit from the *materia medica*. But the inquiry arises, If it be true that the disease, in a large number of cases, is to be attributed to causes existing in the mind, would not the philanthropic physician be able to afford, in many instances, effectual service by suggesting measures which have reference to these, in addition to those appertaining to the *materia medica*? It is too common for medical advisers to pay but little regard to the mental aberrations peculiar to this disease, thinking that, in the language of Shakspeare, "Therein the patient must minister unto himself." To examine them with attention, and, if possible, to afford relief, would, under any circumstances, be embraced within that philanthropy which should be inseparable from the practice of our profession; but, since they depend upon physical causes, they are to be regarded as morbid symptoms, and fall legitimately within the province of the healing art. If physicians were more generally and fully impressed with this view of the subject, perhaps the disease under consideration would become less an opprobrium than it confessedly now is.

It may then be stated, as the first important rule in the treatment of the disease, to ascertain fully the kind and degree of mental aberration which exists. To listen with patience and sympathy to all the changes of feeling which the patient is ready to describe, if he receives encouragement to do so, is, in itself, a source of much consolation, and goes far to secure to the medical adviser the possession of the entire confidence of the sufferer. In connexion with this, the mental characteristics of the individual, his habits, education, &c., are to be considered, both as enabling us better to appreciate the nature

of the changes which have occurred, to decide upon the remote causes of the disease, and to determine upon the measures to be recommended with a view to restoration.

In the second place, it is important to satisfy the patient that the altered condition of his mind and feelings is symptomatic of a morbid condition of body. This is often so little suspected, that his unhappy state is not described until inquiry is made relative to this point. But, as soon as the patient finds it is suspected as associated with the disease, he gladly becomes communicative. It is truly pleasing to witness the surprise and animation which lights up the sombre countenance of the unfortunate dyspeptic, when he finds that the state of his feelings is anticipated by the physician. He seems to hail it as a favourable omen. If the idea has never been suggested that his unhappy condition is the effect of a disordered body, it furnishes the first occasion for hope ; and whether restoration is effected or not, he is enabled to resist and sustain his trials with more fortitude and perseverance.

The next object will be to endeavour to remove the causes which have originated or which maintain the disease. But inasmuch as these are very multifarious, and their different varieties have not been considered, the remarks upon therapeutical principles will of course be very general. Each case, in fact, should form a separate study ; but, in general terms, the patient should be urged to provide that particular kind of stimulus for the intellectual and moral powers, which he seems to require.

In some instances, the difficulty seems to consist chiefly in the monotony incident to routine duties. Then, the indication is to vary their character, or advise a temporary interruption. In such cases, travelling is highly useful ; but, frequently, to be permanently efficacious, it should not be confined within a narrow sphere of time or space. Especially foreign travel is useful by the increased excitement and interest derived from the comparison of scenery, and the habits, manners, and institutions of other countries. But this unfortunately is a measure which only in a small number of cases can be adopted. Those means alone can be embraced which are accessible at home. These, however, are not few or powerless. Sometimes it may be proper to advise an entire change of occupation and locality, in order to supplant completely old by new associations. This method, which has been found of such utility in mental derangement, would probably be not less so in cases of partial alienation, as these cases must be regarded.

When this is not advisable, or practicable, other measures must be adopted to rouse the faculties of the intellect and the

moral sentiments. One of these is the commencement of certain branches of study, or some plan of intellectual effort. Those departments which are pursued by means of observations and experiments rather than abstract contemplations are to be preferred. This will of course apply only to those who have leisure, inclination, and capacity for such occupations, and to that class who require more especially excitement of the intellectual faculties.

In other cases, the social and moral sentiments are to be operated upon by the formation of new connexions, assuming new responsibilities, and by directing the mind to objects which are calculated to engage the feelings of benevolence and philanthropy; such are politics, the cause of popular education, and the numerous particular plans, of every scale of magnitude, tending to the amelioration and improvement of the human race.

The selection of any of these measures, as has been already remarked, will depend upon the combination of circumstances which distinguish the cases individually, and is to be left to the discrimination of the medical adviser. The hearty co-operation of the patient is of course requisite to the prosecution of any plan, and with a view to this the whole subject should be fully discussed and the state of the case frankly stated. One good result will at least accrue from such a course; it will tend to preserve feelings of respect for the character of the medical profession with a class of patients whose experience of it too often leads them to entertain opposite sentiments.*

VII. *On the Source of the Perception of Rhythm in Language.*

Communicated by Mr E. J. HYTCHE.

Amongst the many distinguished men who have been wholly or partially devoid of any taste for music, may be mentioned, Johnson, Burke, Windham, Fox, Mackintosh, and Charles

* The above article is the larger portion of a paper in the *American Journal of the Medical Sciences* for January 1841. We have derived it from the vol. xii. of the *British and Foreign Medical Review*, the editor of which introduces it thus:—"The view taken of a large class of dyspeptic diseases, by the author of this excellent paper, is so accordant with our own observation and experience, and has so long successfully guided our practice, that we gladly transcribe the greater part of it, and earnestly recommend the attentive study of it to the host of drug-doctors in this country, whose name is Legion." We may add, that Dr Flint's views have long been familiar to the phrenological physicians of Britain and America; and that from some expressions in his paper, we infer that he himself makes use of the principles of phrenology in the practice of his profession.—EDITOR.

Lamb. The deficiency, at first sight, might be ascribed to a feeble development of the organs of Tone and Time ; but this was evidently not the case as respects the instances referred to ; as the speeches of Burke, Windham, and Fox, were delivered with graceful intonation of voice, and the writings of Johnson, Mackintosh, and Lamb, are well modulated. This is the more exemplified in the periods of Dr Johnson ; for though he delighted in the choice of rugged and apparently untameable words, yet his sentences are never devoid of a melodious cadence. Wordsworth has also a similar indifference to music ; yet, in his mask, the organ of Tone is very large, and that of Time is above the average size. The influence of the organs is, however, manifested in the musical construction of his verses ; and, like most poets, he can judge of rhythm without counting the syllables, and know whilst composing if any line contain the requisite number of feet.

I have also met with similar cases ; persons have been characterised by a musical style of composition, or an appreciation of oratorical cadence, conjoined with an inability to remember two consecutive notes of the simplest air, however often it might have been repeated in their hearing, and who regarded music with the utmost indifference. I shall notice two cases which have fallen under my own observation. E. H. E. has rather large organs of Tone and Time. He has no taste for music, and cannot remember any tune. He has a good ear for rhythm ; indeed, he is used to poetical composition, and his stanzas are pervaded by much harmony. This is the more observable in blank verse, which is the most difficult of poetical compositions ; his lines are melodious, and the rhythm correct. W. A. has also large organs of Tone and Time. He came to me one day, and said that Mr Deville had given an opinion respecting his development of Tone, with which he entirely disagreed, and he requested me to give him an opinion as to its size. I told him that the organ was decidedly large, which he then intimated to be the opinion of Mr Deville. He, however, stoutly denied the correctness of our decisions—saying that he had no sense of music, and that he never could contrive to learn a single tune. I explained to him the function of Tone : that it was not merely a music-judging or tune-learning organ ; but that its province was to appreciate sounds. He then intimated that he could distinguish the slightest inflection in the voice of a speaker, and received great pleasure from well-modulated oratory ; and subsequently I found his literary compositions to be characterised by much harmony.

To what cause is this phenomenon to be referred ?—why,

in the foregoing cases, should the appreciation of sounds be confined merely to two modes in which they can be combined—namely written or spoken syllables, and not be equally developed in judgment of that combination of sounds to which the term “music” is generally applied? It is probable that, in many cases, this non-appreciation of music, conjoined to a large development of the organ of Tone, is to be ascribed to a deficient organ of Time.* This will become obvious when we consider the components of music. Tone confers an appreciation of sounds; but mere sounds, even though they be combined, do not constitute music—that being produced by the harmonious arrangement of sounds, and to produce this a knowledge of intervals and duration is requisite. This power is imparted by Time, whose province it is to impart an idea of duration. I have met with many cases where non-appreciation of music was accompanied by a small organ of Time, and I found on inquiry that the indifference arose more from inability to appreciate *graduated* sound, than from indifference to sound itself. But this cannot be received as a generally applicable rule; for we find, as in the cases of Johnson, Burke, Fox and Lamb, persons who are incompetent to judge of musical duration, yet possessing a most correct judgment in the cadence of oratory, or in the arrangement of sentences in literary composition.

I am unacquainted with any case where this deficiency has been reversed—that is, where a person has been able to appreciate music, but unable to judge of cadence in oratory. But in most cases a “good ear for music” is accompanied by hypercriticism in this respect; and the person thus endowed has expected to find in speakers the delicate intonation which appertains to music alone. Why this should be the case I am unable to determine; but I can see no reason why a deficiency of judgment respecting oratorical cadence, should not co-exist with an appreciation of music—no more, indeed, than that persons should be able to appreciate oratorical intonation, or literary cadence, in whom music awakens no impression.

The questions involved in the preceding remarks are some of the moot points of phrenology. In many of the organs the same principle is developed; for we find many who excel in one of the branches in which an organ can be employed, entirely incompetent to accomplish the requirements of any other department—and that with such a similarly developed general organization, as precludes the supposition that it can be ascribed to difference in other respects. Thus, as regards Language, one man has an aptitude for acquiring languages,

* Are not the above cases at variance with this suggestion?—EDITOR.

who cannot write his mother-tongue with precision ; and another excels in literary composition, who has a tendency to confound substantives, or adjectives, or verbs. As regards the organ of Tone, Sir George Mackenzie has contributed some interesting cases (see page 331 of the 12th vol. of the *Phrenological Journal*), where the musical power was active in some, but deficient in other, respects. He appears to consider the organ of Tone to be composite, and that each branch of music is appreciated by some one division of Tone. I cannot, however, agree with such minute subdivisions ; as it appears to me that the mere function of Tone—namely, cognizance of sound—indicates its capability of appreciating every mode in which sounds can be evolved. And reasoning from analogy—for it is obvious that the position is beyond the reach of *phrenological* observation—I consider the notion is improbable : Nature does not act on this homœopathic system.

It will be perceived that, throughout my remarks, I have designated the organ generally named Tune, by the appellation of Tone. This is the practice of some other phrenologists. It appears to me that the alteration is of a beneficial character ; inasmuch as a more accurate name is given to the organ, and one more consonant with its nature, than that which it at present possesses. Tune implies harmony[music?]; or rather, such is the idea which the term conveys to the uninitiated, for they are accustomed to employ the word “tune” as equivalent to that of melody. Thus, if any air pleases them, they describe it as a “very *tuneful* song.” Now, an appreciation of melody is not the sole, nor even the radical, function of the organ of Tone—its province being to judge of sounds generally. Sounds are varied in character ; they are grave or acute, discordant or melodious—we can have the song of the nightingale, or the harsh grunting of swine. Such being the case, sounds being of so diverse a character, and only when properly arranged and graduated can they produce music, it becomes obvious that, to designate the organ of Tone by a name which implies melody to ordinary readers, is to convey inaccurate impressions to a class who are sufficiently liable to imbibe wrong ideas without our assistance. Indeed to this erroneous nomenclature must be ascribed the general tendency of non-phrenologists to consider Tone to be the music-appreciating instead of the sound-judging organ. Probably the word Tone is not so significative as that of Sound ; but yet it conveys a definite, and, as near as possible, an accurate meaning ; and when improving phrenological nomenclature, it is desirable to keep as near the original designation as accuracy will permit.

II. CASES AND FACTS.**I. *Case of John Delahunt, executed at Dublin for the Murder of a Boy named Thomas Maguire in December 1841.***

(TO THE EDITOR OF THE PHRENOLOGICAL JOURNAL.)

Sir,—The kindness of a friend procured me an interview with the convict John Delahunt, shortly before his execution at Kilmainham, for the murder of a child. I have, since the execution, obtained a cast of the head, and thus been enabled to verify at leisure the phrenological observations I had previously made. These are now at your service, should you think them deserving of notice in your Journal, and are the more likely to be important, as they are corroborated by some remarkable facts connected with the criminal, which have come to my knowledge. The head is well sized, the basilar and occipital regions very fully developed, and the frontal and coronal portions by no means deficient. This satisfactorily excludes the present case from that class in which the extreme deficiency of the moral and intellectual regions, together with the predominant size of the animal, approximate the culprit to the brute creation, and seriously affect the question of his responsibility. The most remarkable defects in Delahunt's development are to be found in the organs of Benevolence, Ideality, Constructiveness, Time, Tune, Marvellousness, Conscientiousness, Self-Esteem, and Philoprogenitiveness. These are all strikingly deficient. On the other hand, the organs of observation and reflection are full; Hope, Veneration, and Adhesiveness very full; Combativeness, Destructiveness, Love of Approbation and Amativeness large; and Secretiveness, Acquisitiveness, Caution and Alimentiveness remarkably developed. The conversation I had with the criminal himself corroborates several of these observations; and his own confession, taken down by his counsel in presence of the priest the day before his execution, is a decided triumph to the truth of phrenology. I asked him if he was fond of reading? He answered, "Yes, all kinds of books on which he could lay his hands." I asked him what books in particular he preferred? He said, "Books of travels and geography, and that he had always a strong desire to see the world in foreign parts." This accurately coincides with the full development of the frontal region, particularly the organs of observation. Perceiving the deficiency of Constructiveness, I enquired as to that faculty, and found that Delahunt had no love of his trade, and, as he himself expressed it, "was never considered a neat hand."

His trade was that of a journeyman carpenter, in which manual dexterity is particularly desirable. He said also that he did not care for music, and was insensible to melodious sounds ; which is in perfect accordance with the development I have stated in that respect. I asked him, Had he ever taken property which was not his own ? He said, " Frequently," and added, that he felt no compunction for the thefts he had committed. I have since learned, that on one occasion he had been convicted of stealing a clock, for which he had suffered imprisonment. This tallies precisely with his large Secretiveness and Acquisitiveness, combined with small Conscientiousness. The deficiency of Marvellousness explains his carelessness in swearing falsely on several occasions, and the absence of that superstitious awe which so often marks the murderer, and which, I understand from the Governor of the gaol, has never been manifested by Delahunt during his imprisonment. On the other hand, the deep religious impulses he occasionally exhibited with his spiritual adviser clearly evince his full Hope and Veneration. Hope also, in conjunction with Adhesiveness, Love of Approbation, and the observing faculties, rendered him an agreeable companion, particularly to children ; and accordingly, from the brief of evidence I have seen, it appears that he had the power of attaching children to himself in a remarkable manner, and, from other sources I have collected, that his company was always sought after at the meetings and feasts of young people. At the same time, his Philoprogenitiveness is decidedly small, which, coupled with his large Caution, accounts for his having selected a child as his victim. Though he had no compunction in shedding human blood, he was afraid to challenge a powerful resistance. The cruelty and cowardice of his disposition is farther illustrated by an anecdote I have heard from the sister of the person who witnessed it. One day her brother was sitting with Delahunt, when a favourite cat belonging to the family happened to come in. Delahunt called it to him, in that endearing manner Adhesiveness assumes, and the unsuspecting creature jumped up affectionately on his knees. He amused himself playing with it for a while, but suddenly seizing it with both hands round the neck, he squeezed the unfortunate animal with such violence that the blood spouted from its mouth and nose. His companion remonstrated in vain, and the other at last flung the lifeless body from him, exclaiming, " Who cares for the life of a cat !" In like manner he enticed the boy Thomas Maguire to his untimely fate, and, with the forethought and cunning suggested by Caution and Secretiveness, cut his throat from behind, and then threw the body forward, so as

altogether to escape the rush of blood from the wound. The great passion of his soul, however, was the lust of gain, through which he was first led to perjury, and soon after closed his career with murder. Having seen the reward of L.100 offered for the discovery of the persons concerned in the murder of Garlibardo, the Italian organ-player, his Acquisitiveness was roused. His Secretiveness and reflective powers devised the plan of gratifying the propensity, and he swore informations against a man and his wife, who were afterwards acquitted. In the informations, he stated that he actually saw the murder committed, and was very circumstantial in his details, descending to the minutest particulars of place, as might be expected from his large observing organs, particularly Locality. This is farther elucidated by the fact that, while confined in Dublin Castle as a Crown-witness, the thought occurred to him that the circumstance of his having broken off a palm-branch from a tree close to the scene of murder when visiting the place some time after the transaction, and having brought it home with him, might, if properly woven into his evidence, procure more implicit belief. He accordingly sent for his mother, and persuaded her to testify that she saw him enter the house on the evening of the murder with this identical palm-branch in his hand. He then procured a policeman to bring him to the spot, and on fitting the branch to the limb of the tree from which he had torn it, every thing was found to correspond. This at once illustrates his Secretiveness and keen perception of the value of local facts. In like manner, when walking with his innocent victim, he took pains to ascertain the dress and appearance of the child's mother, and (happily unaware that at the time of the murder she was sick in hospital) he swore those informations against her which eventually led to his own detection. For the sake of reward he also swore against three innocent men, for an attack on Captain Cradock at the late contested election in Dublin; and the boldness with which he details matters of circumstantial evidence in this case is not more striking than his accuracy. This is truly surprising to persons unacquainted with the principles of phrenology. From his own confession, it appears that his sole object in the murder for which he suffered was the reward he expected as a witness for the Crown; and he also states that, had he succeeded in this instance, he would have persevered in the same fearful mode of gaining the price of blood. His large Love of Approbation is shewn in the horror he expressed at being exposed to the execrations of the mob assembled to witness his execution; while his large Caution and small Self-Esteem are proved by the dastardly man-

ner in which he met his fate ;—indeed, the features of his cast taken after death, retain the expression of almost idiotic terror. The only remaining observation applies to his Alimentiveness, regarding which I have been informed, that during his imprisonment he always ate plentiful meals with remarkable relish, and was particularly fond of hot buttered cake, of which he partook with a keen appetite the night before his execution.

On the whole development I may remark, that no phrenologist could certify that Delahunt laboured under monomania, or was so irresistibly impelled to the commission of his crime, that he was not, in the eyes of reason and humanity, a responsible being. No doubt the capability to commit that crime is strongly written in his development ; but the power to resist it, arising from full intelligence and very large Caution, is clearly demonstrated. It was therefore a deliberative, not an impulsive act ; it was no delusion of the mind, as in monomania, nor was it an irresistible impulse, as in persons of inferior organization ; but it was the result of thought and contrivance—it had a motive and a plan. The motive,—namely, the acquisition of gain—was a rational one (not absurd, as in monomania), while the plan pursued was deliberative and elaborate. Thus Delahunt was clearly a responsible agent, and in his case, at least, the objection to phrenology is untenable, “ that if men’s characters are written on their heads, they cannot in justice be blamed or punished for their acts.” Indeed, this objection strikes neither at phrenology nor at human nature, but at the great First Cause itself. Phrenology merely professes to discover character, not to stamp it ; it is the index, not the cause, of those differences by which the Author of our existence has distinguished the various manifestations of mind. I am, Sir, your obedient servant,

JOHN ARMSTRONG.

32 HARDWICKE STREET, DUBLIN.

[The following paragraph is from the *Examiner* of 29th January:—“ **CONFESSION OF THE CONVICT DELAHUNT.** This wretched man has made a full confession regarding the murder of the poor boy Maguire. He acknowledged that he had no accomplices in the transaction, and that he committed the murder solely with the view of obtaining a reward by his endeavours to implicate innocent parties in the horrid deed. In regard to the murder of the Italian boy, some months back, it is understood that he has declared all that he then swore against Cooney, the tinker, was false, but as yet he has made no further declaration as to who were the actual perpetrators

of this heinous murder. Delahunt made the following statement:—He said that, for about a month previous to the commission of the crime, he was nightly oppressed with the feeling that he should commit murder, but then formed no definite purpose with respect to his victim, except this, that he intended it should be a child, as it would be less able than a grown person to offer any resistance to his murderous designs. He said that he endeavoured to shake off the feeling that thus oppressed him, but it clung to him with such tenacity that he was unable to expel it from his mind. Having procured the knife at his brother's house, as stated on the trial, for the purpose of committing the murder, he wandered about the streets during the day in search of his prey. At length he perceived the boy Maguire playing with some other children in the neighbourhood of Plunket Street, and his attention was particularly attracted to him by observing him make several ineffectual attempts to jump on a coal-cart that was passing through the street. He called him to him on the pretence that he wanted to send him off a message, and promised to reward him for his trouble. They proceeded together to the several places stated on the trial. At length he brought him to the lane near Pembroke Road, and there perpetrated the bloody deed.”]

II. *Case of an Italian Boy.* Communicated by WILLIAM
M'PHERSON ADAMS, Esq.

Thursday, December 30. 1841.

Florence, Palazzo Briganti—Via Maggio.

To-day, Signor Salvi brought me a boy of about 12 years old, and asked if I could discover, by phrenology, the peculiarities he possessed? Signor Salvi is an opponent of phrenology. I replied that I could; and he assured me there was something extraordinary in him. I asked only if it were in the feelings or in the intellect? He answered, “In the intellect.” I examined the head, and told him that drawing was the *forte*; and after drawing, music, if he was practised; and after music, he would have great facility for calculation, but not yet for mathematics: That often he met with accidents in the streets from his want of caution, and that he was not at all timid: That he often told lies; but that he was not an inveterate liar, and that I thought the fault would pass with age. I also said his Order should be *very* good.

Signor Salvi confessed that *all* was absolutely true to the

very letter. Drawing was his *forte*. If he heard an opera once, he could repeat all the airs in it. His power of calculation was very good, and he kept his things in the most exact order—even his books. That he did lie, but was not obstinate in his lies, and he would never swear to them ; and that in coming to me, he had run against a woman, and that he often met with similar mischances. I then said he had little Veneration, which was confirmed by Signor Salvi.

“ I Donato Salvi, resident member of the Academy of the Crusca in Florence, affirm to be most true all that is narrated above ; and also *so true*, that, convinced of the above facts, I begin to believe in phrenology. I ought also to add a circumstance forgotten by Signor William M^rPherson Adams, viz. he mentioned that the boy had more Benevolence than Veneration, which is perfectly true. And to all above stated, I subscribe myself

“ DONATO SALVI.

“ *Palace of Prince Corsini, Florence.*”

I fear it will be impossible for me to get a cast of any living head while in Italy ; for the modellers tell me their plaster is very different from ours, and that it takes at least sixteen minutes on the face ; and that they would not attempt to do it, unless even the eyebrows and lashes were shaved off ; for in spite of every care, the plaster would stick firm to the hair. This amounts to a prohibition to cast-taking, if a man must shave not only his head but his eyebrows as well. The reason I got Signor Salvi to sign the above paper—or rather, the original, of which it is a literal translation—was, that although those who know me would not require such evidence of its truth, those to whom I am quite unknown would not be unreasonable in suspecting there must be a little use of the paint-brush for a character to be hit off so exactly without one error. I assure you, I felt relieved when it was over ; for had I made but one mistake, to which all men will ever be liable, what a story would it not have made against the poor phrenologist !

III.—*Observations on the Heads and Mental Qualities of the Negroes and North American Indians.* By GEORGE COMBE.*

I have studied the crania of the North American Indians and of the Negroes in various parts of the United States, and also observed their living heads, and have arrived at the following conclusions. The North American Indians have given battle to the Whites, and perished before them, but have never been reduced either to national or to personal servitude. The development of their brains shews large organs of Destructiveness, Secretiveness, Cautiousness, Self-Esteem, and Firmness, with deficient organs of Benevolence, Conscientiousness, and Reflection. This indicates a natural character that is proud, cautious, cunning, cruel, obstinate, vindictive, and little capable of reflection or combination. The brain of the Negro, in general (for there are great varieties among the African race, and individual exceptions are pretty numerous), shews proportionally less Destructiveness, Cautiousness, Self-Esteem, and Firmness, and greater Benevolence, Conscientiousness, and Reflection, than the brain of the native American. In short, in the Negro brain the moral and reflecting organs are of larger size, in proportion to the organs of the animal propensities now enumerated, than in that of the Indian. The Negro is, therefore, naturally more submissive, docile, intelligent, patient, trustworthy, and susceptible of kindly emotions, and less cruel, cunning, and vindictive, than the other race.

These differences in their natural dispositions throw some light on the differences of their fates. The American Indian has escaped the degradation of slavery, because he is a wild, vindictive, cunning, untameable savage, too dangerous to be trusted by the white men in social intercourse with themselves, and, moreover, too obtuse and intractable to be worth coercing into servitude. The African has been deprived of freedom and rendered "property," according to Mr Clay's view, because he is by nature a *tame* man, submissive, affectionate, intelligent, and docile. He is so little cruel, cunning, fierce, and vindictive, that the white men can oppress him far beyond the limits of Indian endurance, and still trust their lives and property within his reach ; while he is so

* This article is composed of passages selected from Mr Combe's "Notes on the United States of North America," of which we formerly promised some extracts. Hitherto, more pressing demands on our space have prevented the fulfilment of the promise.—EDITOR.

intelligent, that his labour is worth acquiring. The native American is free, because he is too dangerous and too worthless a being to be valuable as a slave: the Negro is in bondage, because his native dispositions are essentially amiable. The one is like the wolf or the fox, the other like the dog. In both, the brain is inferior in size, particularly in the moral and intellectual regions, to that of the Anglo-Saxon race, and hence the foundation of the natural superiority of the latter over both; but my conviction is, that the very qualities which render the Negro in slavery a safe companion to the White, will make him harmless when free. If he were by nature proud, irascible, cunning, and vindictive, he would not be a slave; and as he is not so, freedom will not generate these qualities in his mind: the fears, therefore, generally entertained of his commencing, if emancipated, a war of extermination, or for supremacy over the Whites, appear to me to be unfounded; unless, after his emancipation, the Whites should commence a war of extermination against him. The results of emancipation in the British West India Islands have hitherto borne out these views, and I anticipate that the future will still farther confirm them.

In the Negroes whom I saw in Washington, the average size of the brain is less than the average size in the free Negroes of New York and Pennsylvania. In Washington they are chiefly slaves, and in some of them the brain is so small, that their mental powers must be feeble indeed. It is a reasonable inference, that the greater exercise of the mental faculties in freedom has caused the brain to increase in size; for it is a general rule in physiology, that wholesome exercise favours the development of all organs. But I fear that another reason may, to some extent, be assigned for the difference; namely, that the condition of the free Negroes, when they come into competition with the Whites, is so unfavourable, that those of them in whom the brain is deficient in size, and the mental faculties weak, are overwhelmed with difficulties, and die out, and only the most vigorously constituted are able to maintain their position; and that hence, in the free States, we see the highest specimens of the race.

I met, in New York, Mr Matthias, the missionary of the Colonization Society to Liberia in Africa, and he assured me that this settlement and another of the same description are doing well. The Africans are increasing in numbers; they support all the civilization which they carried out with them, live in peace, and maintain law and justice. They are not attacked by the surrounding tribes. He remarked that the Negroes improve in America when free, and that they improve

still more in Africa when they become their own masters. I mentioned to him my estimate of the difference between them and the American Indians (given above), and he acquiesced in my observations in regard to the qualities of the Africans.

Hartford, Connecticut, Sept. 24, 1839. The case of the Africans, captured in the "long, low, black schooner" *Amistad*, in Long Island Sound, is exciting an extraordinary degree of interest. The advocates of abolition represent them as heroes who have nobly risen against their oppressors, and recovered their freedom at the hazard of their lives; while the patrons of slavery designate them as pirates, murderers, and banditti, and call for their trial and execution. We visited them this day in the jail of Hartford, in which they have been placed, waiting the disposal of the courts of law. They are all young, and three of them are children. Several seemed to be in bad health, but the rest were robust and cheerful. They are genuine Africans, and little more than three months have elapsed since they left their native shores. Their heads present great varieties of form as well as of size. Several have small heads, even for Africans; some short and broad heads, with high foreheads, but with very little longitudinal extent in the anterior lobe. Their leader Cinquez or Jinquez, who killed the captain of the schooner, is a well-made man of 24 or 25 years of age. His head is long from the front to the back, and rises high above the ear, particularly in the regions of Self-Esteem and Firmness. The breadth is moderate, and Destructiveness is large, but not excessive. Benevolence and Veneration are well marked, and rise above the lateral organs; but the coronal region altogether is narrow. The anterior lobe also is narrow; but it is long from front to back. The middle perpendicular portion, including Comparison and Eventuality, is decidedly large. Individuality is full. The temperament seems to be nervous-bilious. The size and form of brain indicate considerable mental power, decision, self-reliance, prompt perception, and readiness of action.

Some time ago I communicated to a scientific friend, whose opportunities of observation have been ample, and whose powers of analysis are profound, the ideas which I entertained of the African and native American Indian races, such, nearly, as I have already described them. He has expressed his opinions by letter to the following effect:—"Your views respecting the intellectual capacity and general character of the African race do not, I think, differ very materially from my own. Your estimate of them is certainly higher than mine, though not perhaps very strikingly so. And had you had as

free access to masses of them, especially of those fresh from their native country,* as I have had, I feel persuaded that the difference in our opinions respecting them would have been less. That they are superior to the North American Indians in their moral and social qualities, and therefore in their *tameableness*, cannot be doubted. But that they are superior in intellect I am not yet prepared very positively to affirm. Nor would I affirm the opposite. That our Indians are in all the attributes of mind greatly above *some* of the African varieties is certain. This is especially true as relates to the Boschesemen and other tribes of the Hottentot race. They and the Papuans are such miserable representatives of humanity, that it would puzzle a jury of naturalists to decide to which they are most nearly allied, the genus *Homo*, or the genus *Simia*. All that I have ever very strenuously contended for on this subject is, that the Caucasian race is constitutionally, greatly, and irreversibly superior to the other races of man. And of this I am as fully satisfied as I am that the *Caballus equus* is superior to the *Caballus asinus*, zebra, or quagga. And the superiority is explained and substantiated by phrenology."

At New York, I conversed with a gentleman who passed a winter in Bermuda, when there were many Negro slaves on the island. None, however, had been imported for more than fifty years before the time of his visit, and during that interval they had been educated, well treated, and employed as pilots, and in other offices of trust. He said that they were finely-formed men, their features had improved, and their countenances had lost the heavy African expression. They not only looked but actually were intelligent. This shews the capability of the Negro race of improvement by cultivation.

Our apartments at the Marshall House, Philadelphia, were under the charge of a coloured man, who, although a complete Negro, had a brain that would do no discredit to an European. It was of full size; the moral and intellectual regions were well developed; and his manner of thinking, speaking, and acting, indicated respectfulness, faithfulness, and reflection. He was originally a slave, and purchased his own freedom.

The *Seneca village*, settled by about 900 American Indians, principally Senecas, with some Onondagas, and Cayu-

* My friend is correct in this remark. The Africans of the *Amistad*, who were only a few months from their native shores, presented heads, on the whole, inferior to those of the Negroes whom I had previously seen in the United States.

gas, lies from three to four miles south-east of Buffalo. They live on what is called an "Indian Reserve," extending to 49,000 acres of land. I delivered a letter of introduction to Honnondeuh, one of their chiefs, from whom I obtained some interesting information. We found him living in the same hotel with ourselves.

Honnondeuh appears to be about thirty years of age ; he is well-formed, with features decidedly Indian, and a complexion probably one-fourth white. The form of his brain indicates a cross between the Indian and a white. He was sent by his father, who is an Indian, to the common school at Buffalo, and afterwards to Hamilton College, where he completed a good education. At the school and College he assumed the appellation of Thomas Strong. He speaks English like an Anglo-American, and his dress and manners are those of an American gentleman. He studied law, and at present receives a salary for acting as interpreter and agent between his tribe and the United States' Government. A treaty is now proceeding for the removal of his people, and of all the other Indians in the State of New York (about 4000 in number), to a territory west of the Missouri, extending to 1,800,000 acres of prairie and woodland, purchased by the United States' Government from the Ossages Indians.

When the British first settled in America, they found the different tribes of Indians in possession of different portions of the country as common hunting-ground, but individual property in the soil was unknown. The British settlers, therefore, could not acquire legitimate individual rights from the Indians, because they had no such rights themselves. To prevent frauds, and to lay the foundation of individual titles, the English Government, at a very early date, prohibited all its subjects from purchasing land from the Indians, and entered into a treaty with them by which the chiefs bound themselves, when they wished to sell, to give the right of pre-emption to the Government. Thus it became an established principle, that the Indians had only a right of possession in common, in their own lands ; that they could not sell any portion of them as individual property ; and that the Government alone had the privilege of purchasing up their right of possession, and of converting the tenure of the lands into fee-simple.

After the Revolution, the United States' Government claimed this right, as come in place of the British Crown ; and their whole transactions with the Indians have been founded on it since that event.

An Indian reserve means a certain tract of land left in pos-

session of an Indian tribe, on which no white man is allowed to settle. Not only does the American Government prohibit the Indians from selling these reserves to individuals, but it does not permit them even to divide them among themselves and convert them into fees. They must possess them in common, or give them up, and remove to the west. Farther, it refuses to allow the rights of American citizenship to an Indian in any circumstances. Honnondeuh, under his name of Thomas Strong, purchased a lot of land in the State of New York from an American who had a complete title; "but," said he, "the moment the land was conveyed to me, my blood extinguished the right." He drew up and presented a respectful petition to the Legislature of the State of New York, detailing the circumstances, and praying for an act to authorize him to acquire a legal title to the land. His petition was referred to the Committee on "Indian Affairs," and they reported that it was not expedient to comply with his desire.

"Here we are," said he, "surrounded by white men who found their prosperity on individual property in the soil, and yet they prohibit us, as a tribe, from dividing our own lands among ourselves, and laying the foundation of our own improvement. Not only so, but when we, as individuals, acquire their knowledge, and adopt their manners, they still prohibit us from owning individual property in the soil, either of our own lands or of theirs. In such circumstances, our advance in civilization is impossible. Our people associate with the outcasts and lowest of the whites, because all others exclude us from participation equally in their rights and in their society. We adopt their vices, because an insurmountable barrier is placed between us and their virtues. We become miserable, degraded, extinct." He delivered these words with deep earnestness, but without passion. An American gentleman who heard this exposition, remarked to me, "If you or I had been so treated, we should not have spoken so calmly of our wrongs."

This Indian reserve approaches to within one mile of the town of Buffalo, and we saw many of the tribe in the town. Some were clothed in rags, with a tattered greatcoat above all, and were reeling drunk in the streets; others were clothed like English carters, and some like respectable tradesmen. Most of the women wore trousers, coarse cotton shortgowns, and a large blanket adjusted as a robe. The men wear hats or caps; the women were bare-headed, and often bare-footed, haggard, and ugly.

Another of our party asked Honnondeuh what progress the missionaries were making among his tribe? "They begin at

the wrong end," said he ; "they inform us how to save our souls, but do not teach us how we may improve our condition. We believe that our souls will be taken care of by the Great Spirit ; we want rights, justice, civilization first, and then we shall be glad to hear what the missionaries can do for our souls." He added that the missionaries have kept a school among them, and one of the Gospels (of which he presented C—— with a copy) is printed in the Seneca language. Great difficulty was experienced in translating it, in consequence of the great poverty of that language. I pursued this topic, and learned from him that his tribe have no words to express many of the emotions and ideas formed by means of the moral sentiments and the reflecting faculties, especially when the emotion or idea is a complex one, expressive of the activity of a group of these faculties acting in combination. These emotions and ideas themselves are unknown to them, and the translation is accomplished only by means of paraphrases, some of them of a very awkward character, and which, after all that can be done, do not suggest to the Indian the same emotions or ideas which the English words call up in the Anglo-American mind. In short, the translation, to prove successful, would require in many instances not only to express the original sense, but to evoke feelings and conceptions never previously experienced by the Indian faculties.

He does not understand the language of tribes who live at a distance. There is no perceptible affinity between his speech and theirs. He repeated to us, first in his own language and afterwards in English the speech which he made to the Ossages Indians, and their answer, conveyed through three interpreters. It consisted of a series of announcements of substantive facts ; of distinct propositions ; and of questions founded on these. The answer consisted of direct replies, accompanied by an assurance of amity. We asked him whether Mr Henry Clay, or the best Indian orator, was the more eloquent. He replied that the ideas which they expressed, and the arguments which they used, were so utterly unlike, that no comparison could be made between them. " Our orators," said he, " could not find words to express, nor could our people conceive, the ideas which Mr Clay utters. But within our own range I have heard some of our orators as eloquent as Mr Clay." He said that they instructed some of their young men to speak as orators, or, as they called them, " interpreters."

Honnondeuh had a great deal of conversation with the ladies of our travelling party, gave them Indian names ex-

pressive of qualities, and became a great favourite with them. He acted and spoke with natural ease and dignity, and altogether conducted himself as an educated gentleman, and we treated him as such. He is not married; but he has a sister who is educated, and married to an Indian.

III. NOTICES OF BOOKS.

I. *Grundzüge einer neuen und wissenschaftlich begründeten Cranioscopie.* Von Dr CARL GUSTAV CARUS, Hof-und Medicinalrath und Leibarzt Seiner Majestät des Königs von Sachsen, &c. &c. Stuttgart, 1841. 8vo. Pp. 87. Mit zwey lithographirten Tafeln.

Principles of a New and Scientific Cranioscopy. By Dr CHARLES GUSTAVUS CARUS, Physician in Ordinary to the King of Saxony, Court and Medical Councillor, &c. With two lithographic plates.

In his preface, Dr Carus informs us that it is possible to present to the scientific world a cranioscopy founded on the present advanced knowledge of the physiology of the brain and its relations to the skull, different from that of Dr Gall, free from the objections to which his system is liable, truly scientific in its character, and susceptible of great extension; and that he has now presented such a system to men of science!

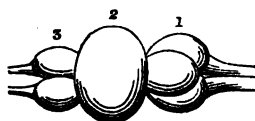
"When we speak," says he, "of the brain as the central organ of the nervous system, we mean that all the primitive nervous fibres whose peripheral expansion is to be found in every part of the body, find their central termination in the brain, although they experience also in the spinal marrow and in the ganglia, the influence of the masses existing there.* Farther, I have pointed out (what, moreover, I had irrefragably demonstrated twenty-seven years ago, in my essay en-

* Dr Carus's style is so vague, that we find a difficulty in presenting an exact translation of his propositions. We therefore transcribe his own words—"Ich habe nachgewiesen, was es für eine Bedeutung eigentlich habe, wenn wir das Kirn, 'das centralorgan des Nervensystems' nennen, nämlich dass damit ausgedrückt sei: Alle Primitivfaserbögen, deren peripherische Endumbiegungen durch alle Gebilde des Körpers verbreitet sind, finden ihre centrale Schliessung nirgends anders als zwischen der Belegungs-masse des Gehirns, obwohl sie bereits in Rückenmark, so wie in den Ganglien, die Einwirkung auch dort vorhandener Belegungs-masse erfahren."

titled 'A Representation of the Nervous System, and particularly of the Brain'), that the brain, corresponding to the three arches of the skull (*den drei Schädelwirbeln*) in all the four higher classes of animals, consists, not of two, but of three cerebral masses; but that sometimes one, sometimes another, is so predominant, that the others are more covered or hidden.

Thus, for example, in fishes, the middle portion, that of the corpora quadrigemina, which in man is so inconsiderable, is the most important and most extensively developed; while in the higher order of animals, the anteriormass (the hemispheres), and the posterior mass (the cerebellum), are the most conspicuous.

Fig. 1. BRAIN OF A CARP.



In man the characteristic feature is the enormous development of the hemispheres. Farther, I have shewn that these three cerebral masses, which appear almost in the same relations in the early human embryo as in fishes (that is to say, the middle central mass is the largest), are always to be recognised as endowed with a peculiar function. The posterior cerebral mass is the centre of the primitive fibres of the muscular nerves, and of those of sex (*Geschlechtsnerven*). In the middle cerebral portion, the primitive fibres of the reproductive organs (*reproductiven organe*) are collected; while in the anterior cerebral mass essentially, we find the primitive fibres of the organs of sense, through the medium of which we derive our ideas of sensible objects, and in a higher degree our knowledge. In short, the three cerebral masses stand in relation to the following psychological qualities.

"1. The anterior cerebral mass (or the hemispheres) is related to the power of representing ideas, to that of recognising and distinguishing them, and to that of imagination.

"2. The middle cerebral mass (*corpora quadrigemina*) is related to the feeling of the condition of our own organic life (common feeling); and to sentiment, or to the feelings which result from the combined action of all our moral faculties.

"3. The posterior cerebral mass (*cerebellum*) is related to will, desire, propagation of the species.*

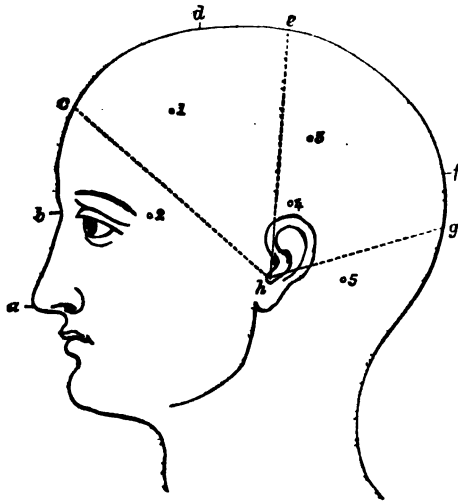
"As the fundamental elements of mental life are only three,

* Dr Carus's words are the following:—"I. Vordere Hirnmass (Hemisphären) Vorstellen—Erkennen—Einbildung. II. Mittlere Hirnmass (Vierhügel) Gefühl vom Zustande des eigenen Bildungslebens (Gemeingefühl)—Gemüth. III. Hintere Hirnmass (kleines Hirn) Wollen—Begehren—Fortbildung der Gattung."

to know, to feel, and to will, so are these three masses the essential portions of the cerebral structure. From these three proceed the three important nerves of sense, those of smell, vision, and hearing, which again correspond to the three great regions of the cranial structure (*entsprechen nun wieder die drei wesentlichen Wirbel des Schädelbaues*), the forehead, the middle head, and the hinder head."

The text is illustrated by several figures, of which we select the one which follows. In fig. 2 (in Dr Carus's work it

Fig. 2.



is fig. 11) "*h c* gives the height of the forehead (*die Höhe des Vorderhauptwirlbels*), *b d* the length of its arch: *h e* gives the height of the middle portion of the head, and *d f* the length of its arch (*Wirbelbogens*): *h g* gives the height of the hinder portion; we cannot accurately measure the length of its arch in life, because it extends to the posterior edge of the *foramen magnum*. The places for taking the cross dimensions are as follows:—1 for the breadth of the forehead; 2 for the breadth of the orbits; 3 for the breadth of the middle portion; 4 for the breadth of the mass above the ears; 5 for the breadth of the hinder mass. The length of the nasal column (*der Antlitzwirlbel*) is given by the measurement *a b*."

Besides the development of the different portions of the brain, continues Dr Carus, the development of the organs of the senses and of their peculiar bones, deserves the particular

attention of craniologists. The eyes and ears are of the greatest importance in the formation (*ausbildung*) of the mind. Through the eye the mind passes outwards into the world, while through the ear the external world enters into the mind. Men in whom the sense of sight predominates are mentally different from those in whom hearing is the leading sense. The former generally possess talents for drawing, architecture, and sculpture; the latter for music and speaking. But there are other important differences between them, resulting from the same cause. The former are more open and bold; they catch more readily at external interests, are more easily instructed, and are accustomed more readily to find their way. The latter are more meditative, more devoted to religious feelings and poetry, more timid, crouching, lazy, and secret, and more prone to mysticism and enthusiasm. The predominance of the one or the other sense may be recognised in the structure of the head. In the inferior animals this is very conspicuous. Animals in which the sense of sight is entirely wanting, or very deficient, are never found to exhibit a well-constructed orbit, while those with acute and powerful vision shew large and much better defined orbits. The organ of hearing, which, in the higher classes of animals, is chiefly composed of bone, affects the shape of the skull still more; indeed this sense has a bone in the skull for itself. When the organ of hearing is largely developed, the head in the middle region (that which lies between the hind and the fore head) acquires a large development, and *vice versa*. The mole, without eyes, has no proper bony orbits; while it has great bones for its organs of hearing, and its skull in this region has great breadth. In apes, the eye-holes are extraordinarily large and well defined, while the organs of hearing are less considerable. The great development of the orbits and of the eyes in birds of prey is also remarkable.

This correspondence between the formation of the head and the predominance of particular senses, indicates itself in the structure of the bones, not only in animals but in men. In point of fact, says Dr Carus, we find that men with large orbits and strongly-marked orbital margins, manifest a decided predominance of the sense of sight. He has made, he says, many interesting observations, by applying callipers to the outer margins of the right and left orbits, at the point where the zygomatic and frontal bones meet, and measuring the dimensions of the head across at these points. The size of the whole of this region is caused, according to him, by the development of the orbits, and he found that in a celebrated landscape-painter, distinguished for his extraordinary talents

in executing details, the breadth there was relatively much greater than in other heads, even in some of larger dimensions. In individuals born blind, the balls of the eye are small, and the bones of the orbits imperfectly developed.

These facts enable us, says he, for the first time to reduce many observations made by Dr Gall and his followers to the principles of reason and a sound physiology. They enable us to understand why persons with sharp eye-sight, a delicate perception of colours, an acute sense of form, and also a great power of finding their way in space, have commonly large orbital margins, particularly those in the frontal bone. "These observations, when referred by Gall to organs of Locality, Form, and Colouring, situated in the frontal lobe of the brain, were altogether without meaning; for the formation of this orbital margin is not at all in man influenced by the brain," and in animals it is still less so. The frontal sinus intervenes. When we examine the large orbital margins of the chamois, he continues, we clearly perceive that they have nothing to do whatever with the convolutions of the brain, but are determined by the organ of sight itself. "Gall's observations, therefore, were correct in themselves, but his explanation of them was entirely erroneous." The talents in question bear a relation to the development of the eyes, and to the energy of vision, but not to any particular development of the anterior lobe of the brain.

In regard to the imaginary organs of Music, Secretiveness, and Cautiousness, says Dr Carus, Gall remarked, that men in whom these tendencies are strong, have broad heads, especially in the region of the temporal bones. The real cause of this structure is, that the bony portion of the organ of hearing is more developed in them. They employ their great sense of hearing in listening to every thing, and hence become cautious and cunning. The great development of the organs of hearing, particularly of the bones, increases the breadth of the head. The elevations of the skull which indicate Secretiveness and Cautiousness, are only concomitant with these dispositions; the cause of them is the predominance of the organ of hearing in the individuals who exhibit them, and the consequence increase of the breadth of the head.

Dr Carus farther describes certain mental characteristics which accompany long and short noses (measured from the root of that organ to the point of its cartilaginous extremity), and others which are found in connection with the length of the skeleton, measured from the crown of the head to the heel bone; but into these we do not enter. Suffice it to say, that

while he arrives by the most flimsy analogies, the boldest assumptions, and the most confused and indiscriminate use of psychological terms, at results closely resembling those of the phrenologists, he treats Gall and his discoveries with sovereign contempt; rejects phrenology in its foundation, superstructure, and applications, as altogether visionary; and with perfect self-confidence substitutes his own speculations in their place, and claims for them the character of a "new cranioscopy based on scientific principles!" He recommends to Dr Morton of Philadelphia to adopt his cranioscopy in his future researches into national character and skulls!

Dr Carus holds the high professional situation of physician in ordinary to the King of Saxony; he has published other works which have gained for him reputation; and he announces on his title-page, that he is a member of twenty-six scientific Academies or Societies in Europe or America. No one can question, therefore, that he is a man of talent, and that his observations and deductions are deserving of respectful attention. We are constrained to add, however, that, in our opinion, the present work will not increase his scientific reputation. It may be praised by that pretty numerous class of men of science who have committed themselves irretrievably against phrenology, and who anxiously catch at every straw that promises to sustain their own sinking reputations as its opponents; men such as those who lauded Dr Sewall's refutation, and who will commend every thing that promises to support their own prejudices, and to obstruct the rapidly advancing science which they have ignorantly condemned: but it is impossible that it can make any lasting impressing on truly philosophical minds. If phrenology had rested on such a frail basis, and had presented such a flimsy superstructure as we find in Dr Carus's work, it would long ere this have ceased to be prosecuted as science, and it would have been altogether unsusceptible of practical applications. Indeed, we can account for the appearance of this work only by the supposition that Dr Carus is really unacquainted with the writings of Dr Gall, and with the progress which phrenology has made in France, Great Britain, and America. We have on former occasions, and particularly in answering the objections of the Penny Cyclopædia in our Nos. for April and July 1841, so fully discussed the principles on which phrenology is founded, and the conditions under which observations on the instincts and brains of the lower animals become applicable to the elucidation of the functions of the human brain, that we consider it unnecessary to enter into any detailed refutation of Dr Carus's assumptions. It is sufficient to remark, that his enumeratio

the faculties which constitute the original powers of the mind is in the highest degree vague, arbitrary, and unscientific; that he ascribes particular faculties to particular parts of the brain in the lower animals, without any sufficient evidence to warrant his opinions, and, in defiance of the clearest rules of the inductive philosophy, arbitrarily ascribes the same functions to the same parts in man; that his theory that the mind is built up by means of impressions on the senses, is destitute of foundation; and that all the superstructure reared on this basis is visionary. Impressions on the senses rouse the internal faculties of the mind and their organs into activity in a somewhat similar way to that in which the external air excites the lungs to action immediately after birth: but as the lungs existed prior to, and independently of, that excitement, and as in different individuals their development is subjected to different influences, which render them large in A, small in B, strong in C, and weak in D, although all breathing the same air, so the mental organs exist independently of the senses, and are influenced in their development by causes not referrible to these.

Speaking of Dr Gall's discovery and its applications, Dr Carus says that the delineations, by Gall and his followers, of particular moral faculties "on certain bony projections, are altogether illogical, unphilosophical, and untenable. Precisely on this untenable hypothesis, however, have the multitude most strongly fastened. They hoped to find in such propositions, the means of immediately discovering in every individual presented to them in ordinary life, whether he was benevolent or religious, endowed with imagination, or cruel, contentious, thievish, and so forth; and in children they pretended to discover particular talents and dispositions by the forms of their heads, and to be able to apply this knowledge in directing their education. These, and such like pretensions, belong altogether to the region of dreams and follies." Dr Carus will excuse us, or at least, if he does not, most of our readers will, for answering this criticism by citing the words of Dr Conolly relative to those men who denied the discovery of the circulation of the blood by Harvey. "The discoverer of the circulation of the blood, a discovery which, if measured by its consequences on physiology and medicine, was the greatest ever made since physic was cultivated, suffers no diminution of his reputation in our day, from the incredulity with which his doctrine was received by some, the effrontery with which it was claimed by others, or the knavery with which it was attributed to former physiologists, by those who could not deny, and would not praise it. The very names of

these envious and dishonest enemies of Harvey are scarcely remembered, and the honour of this great discovery now rests, beyond all dispute, with the great philosopher who made it."

II. *The Philosophy of Necessity ; or, The Law of Consequences, as applicable to Mental, Moral, and Social Science.* By CHARLES BRAY. In 2 vols. 8vo. London : Longman & Co. 1841.

We did not comprehend the scope and tendency of this work by merely reading its title on the back of the two goodly octavos of which it consists. We expected yet another treatise on the *quæstio vexata* of Liberty and Necessity, and marvelled that there could be so much of new matter on the subject as to fill two volumes. We acknowledge our own blunder in this ; for we might have known that the *philosophy* of a great truth is not the evidence of it either in fact or argument, but the consequences of it, when established, in clearing other truths and correcting errors. When, accordingly, we read the title-page, our interest in the work received a sudden increase, which, when we perused the table of contents, expanded yet more into the anticipation, from what we already knew of the author, of an able vindication of the doctrine of Necessity as the only intelligible and consistent basis of the Divine government of the world. This, the most interesting, because the practical, branch of the general subject of Liberty and Necessity, although it has been treated of by several authors, some of them phrenological, has not yet been taken up comprehensively, systematically, and practically. This was yet a desideratum in moral science. It was a task, too, reserved for phrenology ; for no other system of mind could have furnished adequate lights ; and all phrenologists who have the good fortune to read the volumes now before us—for such alone are prepared to appreciate them—will, we feel assured, agree with us that that desideratum has been satisfactorily supplied by Mr Bray.

We would not offer a complete summary of this work, even if we might, lest we should be the means of inducing any phrenologist to deprive himself of the pleasure of reading it. Our notice shall be rather a kind of bill of fare than a meal ; a whetting of the reader's appetite by telling him what he will find on the table which the author spreads for him, rather than an attempt to satisfy him with portions from it.

In a sensible, well-written preface, the author states t'

...is capable of acting independently of all
in his constitution and circumstances. President
demonstration, as the author warrantably holds it
the necessity of human actions, and of the whole
...physical and moral, led him to conclude the
...by whatever authority supported, which assu-
...of will, must be erroneous. The Deontology
...with his thinking on the subject, and "it soo-
...him that the laws of the moral world are,
...incomprehensible of pleasure and pain, and of the
...constitution given to man by his Maker, as fixed and d-
...the laws of the physical world." He proceeded
...in philosophical necessity as his compa-
...he was developing views peculiar to himself
...that a numerous sect in this country build their
...philosophical necessity. The writings of th-
...the author's thoughts to consider the means by
...on the "greatest happiness principle," a
...the moral law, which before were scattered and iso-
...consistent whole.
...able and well known advocate of phren-
...the mental constitution of man accordi-
...He adds, "that the views which he ha-
...could have brought much consolation and s-
...in affording him something defi-
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...in ex-

order of nature, every thing beyond being baseless theory ; that we know nothing of the beginning or the end of things, but can only observe what *is* ; and that all we know of matter and mind is the order in which one event follows another, and one sensation follows another—in other words, antecedents and consequents, cause and effect ; that this is true, whether cause has *power* to produce effect or not ; that we see brain necessary to mental phenomena, but, seeing nothing beyond it, cannot philosophically assume that there *is*, nor conclude that there *is not* ; that all discoveries in sciences are antecedents and consequents ; that, although more difficult of precise ascertainment, antecedent and consequent is the law of mind as well as of matter ; that there is the same invariable connection between every action of the mind and its cause, as between things external ; that not the slightest change takes place in the mind, or the most transient idea passes through it, but has its cause, which cause is always adequate, in the same circumstances, to produce the same effect ; that all we can know of the mind of man is its successive changes, and that although we know nothing of *how* any one cause produces its effects, — of the *power*, as it is called,—we see the *order of nature*,—and that is sufficient to reveal to us the relation of things to each other and to ourselves, which is the end of all science. The author concludes his introductory matter with the following striking passage :—

“ My object in the present treatise is to pursue this inductive method of inquiry in investigating the nature of man ; his place in creation ; the character of his mind ; and particularly to trace to its legitimate consequences the doctrine of philosophical necessity, which the connection between cause and effect implies. I would shew that the mind of man is not an exception to nature's other works ; that like every thing else it has received a determinate character ; that all our knowledge of it is precisely of the same kind as that of material things, and consists in the observation of *its order* of action, or of the relation of cause and effect. This is a truth which, although acknowledged by many writers, has never yet been made of sufficient importance in the science of mental or moral philosophy. It has either been considered as a mere abstraction of no practical use, or else avoided and stifled as leading to fatalism, and consequently dangerous in its tendency. But I hope to be able to shew, on the contrary, that upon this truth *alone*, however it may be said to militate against man's free will or accountability, in some acceptation of the terms, our Educational and Political systems can be properly based, in accordance with the nature of the being to

object of the work to be, to ascertain man's nature and place in creation, and the aim of his existence; to trace the law of consequences, and point out the *good of evil*; to discover nature's sanction of morality, and of man's regard to his neighbour's happiness; and to expose the prevalent errors in the social state, and suggest a remedy. He states that he was, many years ago, dissatisfied with the prevailing systems of metaphysics and ethics; in which he thought the object and aim of existence were misconceived, the divine government misinterpreted, and the foundations of morality mislaid, in the belief that man is capable of acting independently of and contrary to his constitution and circumstances. President Edwards' demonstration, as the author warrantably holds it to be, of the necessity of human actions, and of the whole course of nature physical and moral, led him to conclude that all opinions, by whatever authority supported, which assumed freedom of will, must be erroneous. The Deontology of Bentham aided his thinking on the subject, and "it soon became evident to him that the laws of the moral world are, *through the instrumentality of pleasure and pain*, and of the definite constitution given to man by his Maker, as fixed and determinable as the laws of the physical world." He proceeded to write with a faith in philosophical necessity as his compass; and believed he was developing views peculiar to himself, till he found that a numerous sect in this country build their moral creed on philosophical necessity. The writings of that sect turned the author's thoughts to consider the means by which the moral law, on the "greatest happiness principle," may be best carried into practice; and he has attempted to systematise conclusions, which before were scattered and isolated, into one consistent whole.

Mr Bray, an able and well known advocate of phrenology, assumes as true the mental constitution of man according to that science. He adds, "that the views which he has attempted to set forth have brought much consolation and satisfaction to his own mind; in affording him something definite to believe on subjects which, at first sight, seem despairingly mysterious and unfathomable; in expanding and clearing his views of Providence; and in making known God in the character of the Universal Father, revealing Himself in a language that cannot be misunderstood or misinterpreted, to every sect and every clime; and it will be one of his greatest sources of happiness if they afford grounds of equal hope and trust to any of his fellow-creatures."

He lays down as truths, which may be called axiomatic,—that our whole knowledge is derived from contemplating the

order of nature, every thing beyond being baseless theory ; that we know nothing of the beginning or the end of things, but can only observe what *is* ; and that all we know of matter and mind is the order in which one event follows another, and one sensation follows another—in other words, antecedents and consequents, cause and effect ; that this is true, whether cause has *power* to produce effect or not ; that we see brain necessary to mental phenomena, but, seeing nothing beyond it, cannot philosophically assume that there *is*, nor conclude that there *is not* ; that all discoveries in sciences are antecedents and consequents ; that, although more difficult of precise ascertainment, antecedent and consequent is the law of mind as well as of matter ; that there is the same invariable connection between every action of the mind and its cause, as between things external ; that not the slightest change takes place in the mind, or the most transient idea passes through it, but has its cause, which cause is always adequate, in the same circumstances, to produce the same effect ; that all we can know of the mind of man is its successive changes, and that although we know nothing of *how* any one cause produces its effects, — of the *power*, as it is called,—we see the *order of nature*,—and that is sufficient to reveal to us the relation of things to each other and to ourselves, which is the end of all science. The author concludes his introductory matter with the following striking passage :—

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be educated and governed. If in setting a steam-engine to work the engineer were to leave much to its *free will*, the work would be but badly performed. So as relates to man, if in our educational systems the causes are inadequate to the intellectual and moral results we desire, his *free will* will not supply the deficiency.

"A learned writer observes, that 'Mankind, bred to think as well as speak by rote, furnish their minds as they furnish their houses or clothe their bodies, with the fancies of other men, and according to the mode of the age and country. They pick up their ideas and notions in common conversation or in the schools. The first are always superficial, and both are commonly false.'*" Feeling the force of this, in the following pages I shall pay no attention to existing opinions, however prevalent; knowing that if what is advanced be true, it cannot be really at variance with any other truth; and also, that as God has given us our reasoning powers for the discovery of truth, we ought to feel confident that nothing that He permits us to discover can be inimical to the real interests and happiness of man. In this persuasion, and endeavouring to hold firmly by the fundamental principle of the inductive philosophy already stated, I shall proceed to the consideration of man and his relation to all that surrounds him."

The author then enters into the discussion of his subject with an instructive chapter on matter—inorganic, organic, and sensitive—and another on mind; in which latter, he gives a brief and clear summary of the phrenological analysis of the faculties, and strikes out some rather original views of the radical functions of some of them. As an example, we refer to what he says on the faculty called Marvellousness by Dr Spurzheim, and Wonder by Mr Combe, with neither of which names he is satisfied; the faculty, in his opinion, giving the impulse to *believe*,—being, in short, the faculty of faith. And certainly it is only the wonderers and marvellers who, in matters where intellectual conviction is not concerned, manifest high degrees of belief or faith. It would be interesting, if this view be sound, that Faith, Hope, and Charity, compared in their degrees of value by the Apostle, should be the manifestations of a group of three contiguous organs in the brain.

The author in his next chapter proceeds to consider the origin of our knowledge, and the adaptation and relation of the intellectual faculties to the external world. All that we know he truly holds to be nothing else than that which results from the relation established between our intellectual faculties and

* Boling

what we intuitively believe to be an external world,—“that the world, as it appears to us, is created in our minds by the action of the faculties of Relative Perception, upon the comparatively few ideas furnished by the faculties of Simple Perception ;” and that, therefore, nothing is known to us *as it is*. The demonstration of this fact, by the ascertainment of the perceptive faculties recognised by phrenology, proves how idle the various metaphysical controversies were about the existence or not-existence of an external world. In treating of belief, the author enters into the logical question of what constitutes “first truths,” about which the metaphysicians differ so much. Phrenology cuts short the inquiry by shewing that the indications of the faculties, “the modes of thought or intelligence peculiar to each, whether real or ideal, must be received as first truths, upon which all reasoning is founded.” “Belief,” he adds, “attends the action of each faculty, and cannot be separated from it. The most sceptical, if they express doubts in words, express belief in practice.”* Truth to man, and probably to all created intelligences, must ever be *relative* and not *absolute* ; for, as we have seen, nothing can be known to us as it is. It is impossible, as Hume observes, so much as to conceive or form an idea of any thing specifically different from ideas and impressions. The truth, therefore, now under consideration, is that so called by mankind, and not absolute truth, which can be known to God alone. These fundamental principles of Belief and Truth, which we think perfectly sound, are illustrated at considerable length, with much metaphysical ingenuity.

After devoting a chapter to the connection of mind with organization, in which he discusses Mesmerism or Animal Magnetism,—and another to Materialism, Consciousness, Identity, and Association, on all of which subjects he advances some valuable, and, if not original, at least simple and instructive views,—the author takes up the question of Free Will and Necessity. Necessity he holds to be “logically, if not mathematically, demonstrated.” This is felt by many who cannot bring their minds to acknowledge it as a truth, because of the violence which it does to their preconceived opinions and habits of thinking. Many, besides, who admit it, think it merely an abstract truth, of no use in life, and even dangerous if it were to be held by the vulgar. It would be dangerous, like any other truth, if *misapplied* by the vulgar. “But,” says the author, “that no *truth* is unimportant, still less pernicious, will scarcely be denied by those who love not darkness rather than the light ; and we think it may be shewn that

* The author here evidently speaks of our belief in the reality of our direct perceptions, not of the impulse to believe, called Wonder.

this doctrine, so far from being valueless to man, in a practical sense, has a most important bearing on all his best interests, and is also fundamental to all just views of the Divine government." Of all the Necessitarians,* the author estimates President Edwards most highly; and, as he declares in his preface that, regardless of the mere name of originality, he will quote from any author, when he feels that his own view would only be a copy of that author's less effectively given, he extracts the President's entire argument on the subject. Into this it would be quite superfluous, in us, to enter at length, but we would recommend to our readers to peruse it carefully. Edwards considers Necessity to be demonstrated by the axiom that "nothing comes to pass without a cause." The term "nothing" applies to the moral as well as the physical world; no change, be it a material result or a human action, can bring about itself. The will of man is an *effect*, not a cause. It has been truly said, that "we can do what we will, but cannot *will* what we do." Motive must determine the will; and the idea of our first creating the motives that sway the will, and then yielding to them, is an absurdity. The motives must be causes independent of us, else they cannot be called motives; for motives are *moving powers*, as independent of the thing moved—namely, the will—as the steam is of the steam-engine. President Edwards reduces to the absurd, the self-delusive argument of the Libertarian, that because we can *choose* between two motives, we are free,—by shewing that the choice itself, as an act of the will, has its own motive, and that turns the scale. The argument from the foreknowledge of the Deity is also very conclusive. His omnipotence, too, were gone, if, as Cowper says, it were in the power of even

"One lawless atom to derange his plan;"

if, in short, any of his creatures were actually free; for free such creatures must *absolutely* be, for the argument of the Libertarians; no modified freedom, no *imperium in imperio*, can be conceded to the latter. Were *one* atom free, millions and millions might be free, and creation would be a chaos of confusion. That "invariableness," in which "there is no shadow of turning," that uniformity of nature upon which science itself is built, would then be an empty name. The author, therefore, in all his speculations, assumes Philosophical Necessity as proved.

The views of Responsibility, Praise and Blame, or Merit and

* Our readers may perhaps wish to know who are the principal writers on both sides of this famous question. For Necessity, there are Hobbes, Collins, Hume, Leibnitz, Kames, Hartley, Edwards, Priestley, and Locke. For Freewill, Clarke, King, Law, Reid, Butler, Price, Bryant, Wollaston, Horsley, Beattie, and Dr John Gregory.

Demerit, Reward and Punishment, and Virtue and Vice, which necessarily follow from the doctrine of the necessity of human actions, are briefly and clearly expounded, and shewn to be essentially contrary to those on which society thinks, acts, and legislates; guided, or rather misguided, by the conviction, founded on a feeling merely, that man's will is free, and that, in any particular case, he could have acted differently from what he did. He must act according to his constitution, modified by his circumstances; but what important elements in these very circumstances are the pleasure and pain respectively attending certain acts, moral as well as physical, and that by the very nature of things! This pleasure and pain is the sole responsibility recognised by nature. The author disposes of Praise and Blame thus:—"Upon a cursory view of the subject, the difficulty naturally arises, that if actions are necessary, then merit and demerit are mere names, denoting only the character of certain actions; and that, in consequence, man is not, properly, the subject of praise and blame. Upon reflection, however, it will be found to be just the reverse; for if there were no necessary connexion between motives and actions, if a man might refuse or not to be guided by the former, then, indeed, all praise and blame would be useless; for we praise a certain line of conduct that it may be pursued, or we blame it that it may be forsaken, and our approbation or disapproval act as motives, that are calculated to produce one kind of action more than another.

"We naturally approve of, or praise, that which is agreeable to us, and disapprove of, or blame, that which is disagreeable; and that this sense of what is pleasant or unpleasant to us, may have proper weight with those upon whom our happiness in a great measure depends, nature has given us a disposition by which such praise or blame becomes a great source of enjoyment or discomfort, and a strong motive to incite to some actions and to restrain from others. The expression of praise and blame is, therefore, necessary and proper, although a man could in no case act otherwise than he did act under the circumstances. What a complete revolution will take place in society when the expression of this praise and blame shall be no longer made instinctively, but be brought into accordance with the doctrine of necessity! A child knocks its head against the table, and, thinking the table had a choice in the matter, turns round and beats it. So man, 'a child of larger growth,' knocks his head against some rough corner of another's disposition,—he meets with some injury or offence, and not knowing, or not thinking, that the offender could not possibly have done otherwise, he acts as instinctively as the child,

and expresses his disapprobation, in all probability, in the same way. What, however, would be the conduct of a person brought up from infancy as a disciple of necessity? He would know, that of whatever action a person might have been guilty against him, in the state of such an individual's views and feelings he could not have acted differently, and that it would be as absurd to give way to the feeling of anger in this case as in that of the child. That to produce a different effect towards himself he must alter the cause, that is, he must change the views and feelings of the offender towards himself. If the offence were a personal insult, and the object to prevent it in future—if knocking the party down were the best mode of doing this, why then knock him down; but this display of the combative propensity would probably produce a similar exhibition on the part of the other, and if they were well matched, they would leave off just where they began. But if inquiry were calmly made into the motive of the insult, and the cause removed if possible—according to the dictates of the moral feelings, with kindness and justness—in the generality of cases there would be no fear of its repetition. It can only be this mode of looking at injuries, and the temper of mind consequent upon it, that can make a Christian; that can induce us 'if they smite us on one cheek to turn to them the other also;' and that can give that 'soft answer that turneth away wrath.' By the predominance of feelings, the produce of opposite views to these, many minds dwell in a state of perpetual irritability, occupied in resenting not only real injuries, but imaginary offences; and it is a question, whether a larger amount of unhappy feeling in the world is not occasioned by the latter class than the former.

"The evils resulting from the ordinary mode of considering this subject are very numerous. The common notions concerning merit and demerit, praise and blame, and responsibility, give rise to the worst abuses of our selfish propensities, to envy, hatred, malice, and all uncharitableness. If we were early taught to feel and know that a man's character is the result of his mental constitution, and the circumstances in which he is placed, all such feelings would be kept in check from the mere absurdity of giving vent to them. True, the exhibition of anger, and of those feelings that induce us to take immediate vengeance for an offence, may, to a certain extent, have the effect of preventing offences; and among the inferior animals this is apparently the legitimate and only mode of doing so; but man possessing additional faculties, his reason enables him to foresee the direct consequences of open violence, and to avoid them, whilst producing *secret* and much more com-

licated mischief. How is it possible to 'love our enemies; to bless them that curse us, and to do good to them that hate us,' so long as we look upon them as the cause of our suffering in the sense that they had liberty to do otherwise? But when they are considered as mere instruments, as acted upon by causes over which they had no control, then indeed we may 'love our enemies,' love them as fellow-creatures, pity them as being in all probability greater sufferers than ourselves, and with calmness and reason, guided by benevolence and justice, endeavour to remove the cause of their enmity; or if that be impossible, to guard ourselves against it with as little suffering as may be to them.

"It may be said perhaps, it is impossible but that by a law of our nature we should hate that which is unpleasant to us. This is true, but let the feeling receive its right direction; let us hate *vice*, not the *vicious*. The precautions we take to secure ourselves against that which injures us, are not necessarily connected with our hatred of the injurer. We guard ourselves sedulously against the poison of the viper, and the destructive propensities of the tiger, although, knowing as we do that their power and disposition to injure is the inevitable condition of their nature, we cannot be said to hate them.

"A man cannot be a true Christian or a true philosopher, until he is a practical Necessitarian. It is then only that he can exercise a perfect control over his own feelings, and cease to be acted upon to his own discomfort, by the injurious feelings of others. It is then that he can feel himself master of his own fortune in the strictest sense of the word, for he knows that nothing is uncertain, but that he has only to seek and apply the proper cause, and the effect desired will inevitably follow."

Under the head of Reward and Punishment comes the doctrine upon which a wise treatment of criminals, and efficient protection of society from crime, are founded. It is demonstrable that man has no right to add any thing, in the way of artificial suffering, to the responsibilities which Nature has attached to vicious and criminal actions. All "retributive justice," as it is mis-called, is therefore disclaimed; all vengeance, which is God's alone, and by him correctively and benevolently applied. Society has a right to change the criminal's circumstances, to alter the direction of his impulses, in other words, to educate and reform him; and, if to this the addition of disagreeable restraint be necessary, as it always is, to restrain him by confinement within walls. In these few words is included the whole of the penitentiary principle, the whole treatment of those patients called criminals.* Mr Sampson, whose work we re-

* For the place where necessary restraint and no less necessary reforma-

viewed in our last number, has made this principle practically clear. When the criminal act is committed,—it matters not how irresistible the impulse, even to the extent of insanity itself,—responsibility is incurred, and incurred in the direct operation of necessity; but it is responsibility to suitable sanatory and reformatory treatment, either in the penitentiary or the lunatic asylum—to the principle it matters not which,—not to artificial retributive tortures, which are equally unjust and absurd.

Virtue and vice are not annihilated by the doctrine of necessity, they are only deprived of merit and demerit; by their relation to our faculties, they still possess essentially the characters respectively of attraction and repulsion, and that very attraction and repulsion forms a magazine of motives to human conduct. The author says, "Are the vicious, then, upon an equality with the virtuous? Yes, when the tiger and the lamb are so. When the lap-dog gives place to the wolf, when vipers are hidden in men's bosoms; in fact, when we prefer the company of that which gives us pain to that which bestows happiness. Virtuous, holy, pure, and other terms of like import, have no meaning when applied to actions, in any other sense than as they tend to happiness or misery; and when we speak of any kind of discipline as having a tendency to *perfect* our character, to make us more pure and holy, we cannot mean any thing else but that it tends to increase our capacity of enjoyment, and our power of adding to the happiness of all around. That man is most perfect who is capable of giving and receiving the greatest sum of enjoyment. Neither can we admit that actions are virtuous or vicious according to the motives that dictate them; for all motives are equal, being all dependent, like the actions to which they give rise, upon the mental or bodily constitution and circumstances. 'All motives,' says Bentham, 'are abstractedly good; no man ever has, ever had, can, or could have, a motive contrary to the pursuit of happiness or the avoidance of pain.'"

Perhaps the most interesting and original chapter in the work before us is that which follows, with this startling title, as it must be to most readers, "On the origin, objects, and *advantages* of evil." "Turnbull, in his *Christian Philosophy*, as quoted by Edwards, observes, 'If the Author and Governor of all things be infinitely perfect, then whatever is right; of all possible systems he has chosen the best; and, consequently, there is no *absolute* evil in the universe. This being the case, all the seeming imperfections or evil in it are

tory treatment shall be applied to the criminal, we have long thought penitentiary a most inadequate name; tried, besides, by the doctrine of the necessity of human actions the name involves a solecism.

such only in a partial view; and with respect to the whole system they are good.

“ Whence then comes evil ? is the question which hath in all ages been reckoned the Gordian knot in philosophy. And, indeed, if we own the existence of evil in the world in an absolute sense, we diametrically contradict what hath been just now proved of God. For, if there be any evil in the system that is not good with respect to the whole, then is the whole not good, but evil, or, at the best, very imperfect ; and an author must be as his workmanship is ; as is the effect, such is the cause. But the solution of this difficulty is at hand ; that there is no evil in the universe. What ! are there no pains, no imperfections ? Is there no misery, no vice in the world ? or, are not these evils ? Evils indeed they are ; that is, those of one sort are hurtful, and those of the other sort are equally hurtful and abominable ; but they are not evil or mischievous with respect to the whole. But God is at the same time said to create evil, darkness, confusion ; and yet to do not evil, but to be the author of good only. He is called the Father of lights ; the author of every perfect and good gift, with whom there is no variableness nor shadow of turning ; who tempteth no man, but giveth to every man liberally and upbraideth not. And yet by the Prophet Isaiah he is introduced saying of himself, I form light and create darkness : I make peace and I create evil : I the Lord do all these things. What is the meaning, the plain language of all this, but that the Lord delighteth in goodness and (as the Scripture speaks) evil is his strange work ? He intends and pursues the universal good of his creation ; and the evil which happens is not permitted for its own sake, or through any pleasure in evil, *but because it is requisite to the greater good pursued.* ”

Constituted as living beings are, the view here presented appears to us to be equally sound and consolatory ; although it leaves still unsolved the question, why a benevolent and omnipotent Creator has rendered any degree of evil necessary for the attainment of even the utmost good ?

Mr Bray goes on to shew that there is no evil but *pain*, mental and bodily ; that all actions are virtuous or vicious as they tend to produce pleasure or pain ; that the limitation of man's powers requires a monitorial corrective of his actions, and that the best conceivable corrective is pain. “ No part of the known creation, then, is free from evil, in the sense in which we thus use the term, as it is *the invariable accompaniment of that error which is consequent upon the necessary limitation of the powers of knowing.* ”

A section is devoted to shew that pain is the necessary and

most effectual guardian of that system of organization upon which man's happiness depends. This is quite obvious with regard to physical pain, but as it is less so with regard to moral, the author bestows more reasoning upon it. Moral suffering for our own infringements of the moral law is as direct in its purpose as physical pain; but we suffer as members of society, and for infringements not our own. Here the formation of our notions of justice on the basis of necessity comes to our aid. Free will would *individualize* us as members of society, and would certainly entitle us to complain that we should be made to suffer for any other offences but our own. The legal maxim, "*Culpa tenet suum auctorem*," would on that principle be absolutely, and not relatively, true. But so close is the mutual relation which the Creator has established in that society which the gregarious nature of man produces, that not only are numberless enjoyments the result of the union, but there necessarily follows a *community* of suffering from the moral evils of ignorance and crime; which suffering is the moral pain which prompts us to associate to remove the causes. We wish we had space to lay before our readers in an extract the beautiful process of reasoning by which the author shews how this view of society renders possible, nay necessary, the love of our neighbour, by shewing that it is according to nature as well as to Christianity. "Christianity says, 'Love your neighbour as yourself.' Nature says, 'Love your neighbour as yourself;' but all our existing social institutions, based upon the assumption of the reality of free will and accountability, seem to render this impossible; and the pain or evil that nature benevolently causes man to suffer, that he may be compelled so to change his ideas and institutions as to make practicable the law of universal brotherhood, has hitherto been unavailing, apparently, although it has doubtless set those causes in motion which must ultimately bring about the desired result. The advantages that ought to be derived by the race generally from the progress of civilization, are for the most part monopolized by the few, whose happiness, meanwhile, would be far better secured if they were made to participate only in the general well-being. The overgrown wealth which tempts the possessor to the destruction of the powers of enjoyment which nature gave him, would suffice to call into healthy and vigorous action those of hundreds, cramped and stunted under the chilling influence of want. The sum of ease and leisure which eats into the soul of the indolent in the lap of luxury, would refresh the minds, and cheer the spirits, of a multitude whose incessant toil furnishes the perverted blessing to its victim. The object and advantage of moral

evil, then, is to extend these advantages to the whole of mankind."

Crimes are diseases in society, the result of something unsound, but capable of cure, or rather, by means now only beginning to be understood, of prevention. The health of society generally will be improved by the same means; hence indirect good even from crime. For a lengthened and beautiful illustration of the doctrine of the advantages of evil, we are forced to refer to the work itself; and likewise for the author's views on the principles of morality, including moral obligations, pain and pleasure, and man in his relation to external objects, and in relation to his fellow-creatures. With these points the first volume, which is devoted to the *moral* philosophy of necessity, is brought to a conclusion.

Into the second volume, which contains the *social* philosophy of necessity, we regret we cannot enter to an extent to do it any thing like justice. We must therefore content ourselves with recommending the whole volume to the reader's perusal and study. He will find the author's doctrine of the "Law of Consequences" throwing much light on the causes of the present miserable condition of society; on the various means which are at present proposed as remedies—which, however, he much under-estimates—for the deep-seated disease that threatens its dissolution, such as political reform, free trade, emigration, education, and religion; and on the causes of the poverty of the working-classes. After noticing these the author brings forward his own plan of social reform, namely, the natural union of labour and labour's fruit, capital, in the same individuals, in an enlightened system of co-operation. We have not any where met with a pleading for the co-operative or brotherly, versus the competitive or selfish, social basis, more eloquent and powerful. The subject, in the author's hands, is divested of that extreme and impatient character which it has assumed in those of some of its advocates. He waits with philosophical calmness for the *gradual* advent of social co-operation, as the "necessary effect," as he holds it to be, of the spread of sound morality, and knowledge of morality's true basis. Whether, in a just view of the faculties of man—of his whole constitution, physical, moral, and intellectual—and its relation to the creation of which he forms so important a part,—we ought to conclude that he is capable of becoming a co-operative animal like the bee, we are not yet prepared to express an opinion. The subject would require a treatise to do it justice, and we may at some future time devote one to its consideration.

We take leave of Mr Bray, with our best acknowledgments

for the pleasure, and the interesting materials for thinking, which he has given us in the able work which we have, after all, but imperfectly analysed. Z.

III. *The British Medical Journals.*

We resume the useful employment of gleaning from the lately published medical journals, such remarks and cases as seem likely to be instructive and interesting to phrenological readers.

The British and Foreign Medical Review, No. XXIII, contains a notice of a recent work by Dr Bingham, on the religious delusions of the insane, and on the practicability, safety, and expediency of imparting to them Christian instruction. The reviewer expresses what we think a very sound opinion—that, as far as religious impressions can be made available to the government of the affections and conduct, they may be usefully encouraged even in a lunatic asylum; but that if they disturb the mind they must be avoided, like every other cause of hurtful excitement. Dr Conolly's First Report on Hanwell, in October 1839, is quoted; in which, speaking of the assemblies of the patients for religious service, he says—“The demeanour of the patients on these occasions is for the most part admirable. Few spectacles can be more interesting, or more affecting, than that of so many lunatic persons, many of whom are at other times violent, noisy, agitated, and talkative, exercising so remarkable a degree of control over their behaviour for such a length of time. The practice of this control is, unquestionably, the principal advantage which many of the patients are capable of deriving from attendance on these services. Care is taken that they appear decently dressed; several of those who can read are supplied with prayer-books; and they evidently look forward to Sunday with pleasure, and are mortified when any accident interferes with their attendance in chapel. Yet a very small number of them seem to have any distinct religious impressions. Many are prone to the terrors of an alarmed conscience, and believe that evil spirits are immediately busy around them. A few present examples of religious conceit; several consider themselves to be divine persons. One asserts that he is the Almighty; and refuses to go to chapel, although he rings the chapel bell very diligently. In very few of the patients does religion appear to be a source of hope and tranquillity. The cautions which these circumstances render necessary in the at-

tempt to administer religious instruction to them are too obvious to require to be dwelt upon." In a later Report, Dr Conolly observes—"Although so many male and female patients attend the chapel regularly, the physician has only found it practicable to recommend a very small number to the private attention of the chaplain. Whenever a desire is expressed to see him it is complied with; and to those who are seriously ill, it is often suggested that they should have some conversation with him. This is sometimes declined, but more commonly accepted. To make similar propositions to the numerous patients who think that nothing whatever is the matter with them, would probably give rise to morbid trains of ideas, which it is better not to excite. There are also some patients in the asylum whose thoughts perpetually dwell on religious topics; but with so much wildness and enthusiasm as to render it prudent not to encourage but rather to avert such ideas from their minds. Some of the patients admitted with a propensity to suicide, have appeared to be comforted by conversation with the clergyman. A great number of the patients are gratified by being allowed to have a bible and prayer-book."

With respect to the conduct of chaplains towards lunatic patients, the reviewer judiciously suggests that they ought to be addressed in an affectionate strain: "They must love and respect their pastor; he must assume no airs of secular superiority; he must refrain from the scolding tone of one preaching to hardened convicts; and he must have sense and discretion enough to know when to desist, and when to hold his peace. If he has not this sense and discretion, and much real benevolence also, his labours will be vain, and his interference mischievous. The great principle in the government of lunatics is to refrain from irritating them; and, on every occasion, if not quite impossible, to proceed by methods of persuasion instead of force. If a few words in season are beneficial, a very few words out of season are equally pernicious. When these precautions are not despised, the chaplain may become a highly useful officer; and if he is a man of sense he will not consider it any degradation to be an auxiliary to the physician. Then it may be really ascertained in what proportion and description of cases the insane patient was capable of listening with patience and edification to religious conversation; and how much advantage the means of cure may receive from this exalted means. This will never be ascertained by those who consider the inmates of a lunatic asylum, or even those of them who delight in attending the religious services, as quite as capable of receiving the attention of a

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clergyman as any other persons of their class of life. The very maintenance of such ground would prove that the clergyman wanted the knowledge requisite for the office he had undertaken." The reviewer alludes with merited approbation to the statement of Dr Bingham, that reasoning is of very little service in the case of delusions, whether religious or of any other kind, and that the best thing is to lead the mind from the delusive subject as much as possible. This, the reviewer thinks, is far preferable even to appearing to coincide in such delusions: they should seldom be alluded to; be contradicted calmly, if at all; and never be ridiculed: thus managed, he adds, they will often die away of themselves.—One point in particular seems to us to merit the attention of those who impart religious instruction to the insane. If the delusions be of a melancholy character, the utmost care ought to be taken to avoid increasing the evil by presenting to the patient those gloomy views of religion which unfortunately are too prevalent, and which of themselves are apt to be the exciting cause of insanity in moody and irritable persons. In the case of the poet Cowper, for instance, it cannot reasonably be doubted that the well-meant but extremely injudicious sort of Christian instruction which John Newton administered to him, coupled with the religious exercises which were enjoined, was the main cause of the relapse of the amiable and sensitive patient into gloomy and hopeless insanity.

The same Number contains a review of Dr Laycock's *Treatise on the Nervous Diseases of Women*. Speaking of a chapter on the relations of the reproductive organs to the nervous system in general, the reviewer of that work says,—“Among the influences on the system at large produced by the state of the reproductive functions, Dr Laycock notices the pugnacious propensities remarkable in the males, and the artfulness of the females, qualities which are not without their parallel in the human race. Another remarkable effect of the change in the system at large, induced during the performance of the reproductive functions, is a loss of appetite or cessation of its indulgence, such as is peculiarly manifested in insects. The influence of physical love on the appetite of men and women is a matter of daily observation; and bulimia, pica, and strange longings, are morbid modifications of the appetite, and belong to the same class of phenomena as this, anorexia,—like it, being characteristic of the pregnant, chlorotic, and hysterical female. The whole nervous system is excited by the sexual stimulus, as much as by medicines which have a direct and powerful influence on it.

In a review of the second volume of Dr Tweedie's “*Library*

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In a review of the second volume of Dr Tweedie's “Library

of Medicine," we find (p. 99) the following remarks on views expressed by Dr Bennett in his prefatory general observations on the anatomy, physiology, and pathology of the nervous system :—

"The general pathological views developed by Dr Bennett are based on the hydraulic principle maintained by Kellie, that the absolute quantity of blood contained in the cerebral vessels is always the same, however much it may vary in the other parts of the vascular system; but that the relative proportion of blood in the arteries and veins of the brain, as well as the degree of pressure exerted by it, are subject to frequent and rapid variations. Of the general truth of this principle, and of its applicability to pathology, we have no doubt; but we think our author is carrying its application a great deal too far, when he assumes that all derangements of the cerebral functions, the cause of which cannot be explained by structural lesions detected after death, are to be referred to cerebral congestion. (p. 9.)

"We admit that we are in no better condition directly to disprove this opinion than Dr Bennett is to establish it. Facts are wanting; but where this is the case, we are justified in resorting to the most probable analogies. Now, there is every reason to believe that various disturbances of function may occur in a portion of a nerve quite independently of disease of the brain or spinal cord, as neuralgia and paralysis; and it will not be denied that, in many such cases, no derangement of vascular action or lesion of structure can be discovered by the nicest examination; but here the hydraulic principle does not apply, the free tract of the nerve being quite differently related to atmospheric pressure from the enclosed mass of the encephalon; we are therefore led to admit the possibility of deranged nervous function independently of vascular congestion; and if in one portion of nervous matter, why not in another? If, for example, in the radial or anterior tibial nerve, why not in the brain or spinal cord?

"The truth is, we know literally nothing of those molecular changes from which the healthy actions of the nervous system most probably result; and while we continue thus ignorant, we must not hope to arrive at any satisfactory explanation of those morbid actions of the same system which leave no visible traces behind them."

The reviewer ascribes great merit to Dr Hope's article on Inflammation of the Brain, in the same work. "The description of actual inflammation of the brain and its membrane is very complete and masterly. In treating of meningitis the author inquires whether the arachnoid or the pia-mater be the

more frequent seat of inflammation ; and concludes, in opposition to the opinions of Lallemand, Parent-Duchatelet, and Martinet, that the pia-mater is most frequently affected. He states that he adopts this opinion not only from extensive observations of his own, but from an analysis of the cases recorded by several distinguished pathologists ; and he agrees with the majority of English writers, that we have no means of distinguishing the symptoms of arachnitis from those of inflammation of the pia mater, and that it is therefore expedient to treat of inflammation of these membranes under the common name of *meningitis*. The question whether the symptoms of meningitis can be distinguished from those of cerebritis is discussed by Dr Hope with great judgment. He admits that meningitis cannot be supposed to exist without exciting inflammation or irritation of the surface of the brain, because the membranes and the contiguous substance of the brain are immediately supplied by the same bloodvessels, which, ramifying and subdividing with extreme minuteness in the membranes, penetrate the cerebral substance in every direction. This arrangement, as observed by M. Georget, constitutes an exception to the ordinary manner in which bloodvessels enter the substance of organs ; for these in general being more or less spongy and areolar, the vessels penetrate them by trunks and branches, and the whole of their vascular system exists in their interior : but the brain is not spongy and areolar ; it contains no cellular substance ; and presents therefore a necessary peculiarity in the distribution of its bloodvessels. Dr Hope observes, that the connexion between inflammation of the membranes and inflammation or sympathetic irritation of the adjacent cerebral surface, which is implied in such a distribution of the bloodvessels, is strongly corroborated by morbid anatomy, and no less so by the symptoms of disease, since the lesions of the intellectual, sensitive, and voluntary powers which accompany meningitis argue a disturbance of the functions of the cerebrum itself. Is it then possible to distinguish meningitis from cerebritis during life ? Many eminent writers, among whom are Abercrombie and Georget, believe that it is not possible. Dr Hope's observations and dissections have led him to a view of the subject which appears to us so just that we shall give it in his own words : ' When we place, on the one hand, meningitis with the least possible degree of inflammation of the surface of the brain, and on the other, cerebritis not implicating the membranes, the difference between the symptoms is so marked, that the diseases can scarcely fail to be distinguished from each other by a discerning practitioner. But when the two affections coexist, the one will so far modi-

fy the other, as in a great measure to neutralize the characteristic symptoms of each. Yet the compound or intermediate character of the symptoms in such cases will sometimes indicate even the double affection, and a predominance of the one or the other may occasionally be inferred from the preponderance of its particular symptoms. We are far, however, from supposing that these latter distinctions can be formed with certainty. The utmost length to which it is possible to go, is to establish more or less strong probabilities."

The critic of "*Winslow's Anatomy of Suicide*" (p. 150), comments upon that writer's argument, that self-destruction is an act of cowardice, not courage—a point which, in his opinion, admits of some discussion. "Any difficulty," says he, "which the question may appear to present arises, we think, from not discriminating sufficiently between physical and moral courage. We regard suicide as an act of moral cowardice, and we believe that the degree of physical courage of the individual has very little to do with the matter; for it happens in many other instances besides that of suicide, that an utter subversion of all moral firmness and self-possession causes a suspension of the instinct of self-preservation. This has often been exemplified in the valour of men, and of women too, who have fought desperately because they were desperately frightened; the general sense of fear so overwhelming the moral and intelligent being, that the actual physical causes of danger are made light of, and rashly encountered. An amusing illustration of this is contained in James Hogg's tale of 'Basil Lee.' The hero performs prodigies of valour, and gets the reputation of being the bravest man in the British army, because, at the approach of battle, he is so transported with terror that he has only one idea left, which is a vague though intense conception that everything is to be exterminated; and accordingly, he lays about him with wonderful energy and effect. We believe that suicide might be committed by the bravest man in the world, as well as by the man most deficient in personal courage; but no man of moral courage would commit an act which implies an utter loss of all self-dependence, as well as all dependence upon Providence." In noticing what Mr Winslow says about the moral and physical treatment of the suicidal disposition, the reviewer expresses his approval of the recommendation that persons liable to it should cultivate a love of nature, and an interest in the affairs and sympathy in the misfortunes of their fellow-beings. "The contemplative frame of mind engendered by the intense feeling of natural beauty is often mistaken by the vulgar for melancholy; but we believe it to be in reality one of the surest pre-

servatives against that state. We never knew a genuine disciple of Wordsworth who was a melancholy man. Again, it may seem paradoxical to maintain that an active participation in the misfortunes of others can win us from our own sorrows, and restore cheerfulness to the desponding mind. Yet such is the fact. We gain wisdom and strength by comparing ourselves with others, and our destiny with theirs. We find them bearing up against the very evils that we are sinking under : we see them sinking under evils which to us appear trivial : thus strength springs even from reciprocal weakness, and endurance from the interchange of affliction. Grief is indolent, benevolence is active ; and in our successful exertions to overcome the difficulties or assuage the miseries of others, we often discover how much we have been wanting to ourselves, and find an apparently overwhelming evil resolved into our own want of fortitude and activity." With respect to Mr Winslow's opinion, that suicide is generally the result of insanity, the reviewer says—" We think he is right. It appears to us that there are two widely different states which singly or combined may conduce to suicide. The one is a state of *perverted instinct*, in which a blind propensity to self-destruction supersedes the instinct of self-preservation : a state parallel to that in which a mother destroys her child without being able to assign any cause for it but an irresistible impulse. The other is a state of moral depression, caused by the consciousness of evils which are either in themselves of dreadful magnitude, or which the mind of the individual is too feeble to bear. In this state the sufferer, though he still fears death, and perhaps trembles at the unknown futurity into which he is about to plunge, still dreads nothing so much as his present anguish, and thinking that any change must be for the better, voluntarily puts a period to his earthly existence. Now it will not be disputed that the first of these states, that of perversion of the most powerful instinct of nature, constitutes a form of mania. With respect to the second state, it should be remembered that the evil which is thought intolerable, and to which death itself is preferred, is usually one which a vigorous and well-poised mind would soon shake off ; and that very few evils are insupportable if viewed in a just light, and met in a proper spirit : the very disposition, therefore, to regard any of the ordinary evils of life as utterly unendurable implies either a perversion of ideas as to the fact, or a very enfeebled condition of the moral powers, either of which is sufficient to constitute melancholy. When to these considerations we add, what is truly stated by our author, that in a great majority of cases a careful inquiry into the previous conduct of the suicide

would afford strong indications of insanity, we think we are justified in assuming the general position that suicide is the result of madness. We entirely assent also to the opinion of Mr Winslow, expressed in another chapter, that in the few cases which may be doubtful, the unhappy individual should have the benefit of the doubt, and that the verdict *felo de se* should never be returned."

From a brief notice (p. 229) of a "Treatise on Internal Hydrocephalus," published at Amsterdam in 1839 by G. Vrolick, Professor at the Athenæum there, we learn that the professor "fully agrees in the opinion of Gall respecting the *unfolding* of the convolutions in hydrocephalus; and points out that the fact was known by Hernauld, who described it, though he could not explain it, in the 'Histoire de l'Académie Royale des Sciences, 1740,' p. 375. Hitherto, however, the fact has not been well illustrated; and therefore, to supply this deficiency, the author annexes three engravings from two cases of cerebral expansion or unfolding which he met with in 1812, and all of which shew in a remarkable manner the almost complete obliteration of all appearance of convolutions or irregularities on the surface of the brain. At the same time, however thin the layer of cerebral substance thus expanded, he observes that every portion of it shewed its normally distinct constitution of white and grey matter; a fact which, with the others more commonly noticed, can leave no doubt that the change which the brain undergoes in simple hydrocephalus is one of form only, and that both its structures and (if the effusion have taken place slowly) its functions, may remain unaltered. All these skulls, moreover, present examples of unequal expansion, in consequence of the unequal accumulation of the fluid in the several ventricular cavities."

(To be continued.)

IV.—Our Library Table.

The January Number of the *Edinburgh Review* contains a clever and elaborate article, entitled "Phrenological Ethics," the main object of which is to inquire into the validity of the claims set up by Mr Combe, in his Lectures on Moral Philosophy, and Essay on the Constitution of Man, on behalf of Phrenology, as an effectual elucidator of ethical questions that were previously obscure. The reviewer says nothing against Phrenology itself; but, assuming for the sake of argument that it is true, endeavours to shew that it has performed no such services to moral science as those attributed to it. There

is a remarkable difference between the tone of the present reviewer and that of Dr Gordon and Lord Jeffrey in 1815 and 1826. Reasoning has now, in a great degree, taken the place of ridicule; and while, on the one hand, the supposed errors of the phrenologist are unsparingly handled, on the other, the critic acknowledges, in frank and cordial terms, the soundness and practical value of much that his writings contain. Whether Mr Combe will publish a reply, we do not yet know; for, in consequence of his absence from Scotland, he has not had an opportunity to peruse the article. Till this be ascertained, we think it unnecessary to obtrude on our readers any observations of our own upon the article in question. Rumour ascribes it to the pen of Sir William Hamilton.

Another critic, under the designation of "One of the People," has published *A Letter to George Combe, Esq., on the subject of his Essay on the Constitution of Man.* Here, also, the truth of Phrenology is taken for granted, and an attempt is made to shew that Mr Combe's conclusions do not logically follow from his premises.

A spirited and comprehensive treatise on Phrenology has been issued by Messrs W. and R. Chambers of Edinburgh, forming Nos. 59 and 60 of their valuable series of publications entitled *Information for the People*. It is illustrated by twenty woodcuts, and, for the guidance of such of its many thousand possessors as desire to prosecute the study, a list of the standard phrenological works is given at the end. Nobody who can afford the very moderate sum of *threepence*, is now without the means of obtaining a correct knowledge of the leading principles and facts of Phrenology. The following judicious note is prefixed by the editors:—"It has of late been customary for the conductors of popular cyclopædias to admit articles on Phrenology; but in most, if not all, the instances in which this has been done, the articles were the composition of persons who denied that Phrenology was a true system of mental philosophy, and whose aim rather was to shew its want of sound foundation than simply to present a view of its doctrines. In every one of these instances, it was afterwards successfully shown by phrenological writers, that their science had been misrepresented, and its doctrines challenged on unfair grounds; so that the articles in question might as well not have been written, in so far as the instruction of candid inquirers was concerned. We have resolved to eschew this practical absurdity, by presenting a view of Phrenology by one who believes it to be the true system of mind. This we conceive to be a course the more necessary, that Phrenology, overlooking altogether its organological basis,

presents a far more intelligible view of the faculties of the human mind, and the phenomena of their working, than any of the metaphysical systems. It is eminently, we think, the system of mental philosophy for the unlearned man, because it is much less abstract than any other. In perusing the account which it gives of the mind and its parts, ordinary people feel, for the first time in their attempts at psychological investigation, that they have ground whereon to rest the soles of their feet. Thus, supposing that the observations made with regard to the connexion of certain manifestations of thought and feeling with certain parts of the brain to be untrue, there is still a distinct value in Phrenology, as an extensively available means of studying mind. We deem it right, at the same time, to mention that Phrenology appears to us as beforehand likely to be true, in as far as it assigns a natural basis to mind; while we are equally sensible that its leading doctrines have acquired a title to a very respectful attention, from the support given to them by a vast amount of careful observation, and the strikingly enlightened and philanthropic aims for which many of its supporters have become remarkable. With these introductory remarks, we leave our readers to form their own opinions respecting the science, as far as they are enabled to do so by a treatise necessarily brief, and which, therefore, admits of but a slender exhibition of evidence."

Into the details of the treatise we cannot here enter. Generally speaking, the author follows pretty closely in the footsteps of Mr Combe, from whose System, we may add, all the illustrative cuts are copied. To Dr Andrew Combe is paid a compliment, the justice of which that phrenologist, as we happen to know, declines to recognise: it is that his work on *Insanity* "may be said to have revolutionized the whole science and practice of that interesting field of medicine." Now, all that can be accurately affirmed is, that Dr C. has contributed to develope, systematize, and diffuse the improved mode of treatment first efficiently advocated by Pinel, and since, still farther by Esquirol, Gall, Spurzheim, and a host of benevolent physicians of the present day.

The American Phrenological Journal for January commences with an article entitled "Our proposed Course," in which the editor, Mr O. S. Fowler, states that his main object will be the publication of facts in preference to abstract reasonings, the cases being frequently accompanied by drawings the size of life. He seems to be a zealous and disinterested phrenologist, and mentions that he has sacrificed a considerable sum in carrying on the Journal. We hope that in its new form the circulation will materially increase. Judging from this Number, we infer that he himself is to be the sole regular contributor to the work.

The *annual Reports of the great lunatic asylums*, so far as we have been favoured with copies of them, are highly gratifying, and shew a rapidly progressive improvement in the treatment of the insane, attended with success correspondingly great. We rejoice to perceive that the non-restraint system at Hanwell is more and more found to be practicable and beneficial. In the course of a very few months Edinburgh will be provided with an asylum worthy of the metropolis of Scotland.

There is a brief and well written account of Dr Spurzheim in the 22d volume of the *Penny Cyclopædia*. In our next number we shall extract the estimate of his scientific character which it contains.

IV. INTELLIGENCE, &c.

The Phrenological Association.—At a meeting of the Committee of the Phrenological Association, it has been resolved that the session of the Association for 1842 shall be held in *London*; the meetings to commence on Monday, 20th June. And, owing to the satisfaction created by the arrangements of last year, it is intended, if possible, upon the present, as upon that occasion, to secure the great room of the Society of Arts. A Sub-Committee, consisting of the following gentlemen, has been appointed to make the requisite preparations, viz.:—H. G. Atkinson, Esq.; T. H. Bastard, Esq.; Richard Cull, Esq.; Dr Moore; M. B. Sampson, Esq.; E. S. Symes, Esq. The Secretaries are, Richard Cull, Esq. 14 Caroline Street, Bedford Square; and M. B. Sampson, Esq. Clapham New Park, Surrey.

London Phrenological Society, Exeter Hall; Session 1841-42.—OFFICERS AND MEMBERS OF THE COUNCIL:—President, John Elliotson, M.D., F.R.S.—Vice-Presidents, H. Atkinson, Esq.; H. B. Churchill, Esq.; H. P. L. Drew, Esq.; G. Lewis, Esq.—Treasurer, J. I. Hawkins, Esq.—Secretary, E. S. Symes, Esq.—Librarian, W. Wood, Esq.—Curator, W. Hering, Esq.—Other Members of the Council: Archibald Billing, M.D.; George Coode, Esq.; R. Edwards, Esq.; J. G. Graeff, Esq.; R. C. Kirby, Esq.; S. Logan, Esq.; Hudson Lowe, Esq.; Richard Maugham, Esq.; Joseph Moore, M.D.; J. B. Sedgwick, Esq.; Prof. C. Wheatstone, F.R.S.; C. F. Wordsworth, Esq. Ordinary Meetings for papers and discussions:—Mondays, November 1st and 15th, December 6th and 20th, January 3d and 17th, February 7th and 21st, March 7th and 21st, April 4th and 18th, May 2d and 16th.—Extraordinary Meetings, for popular lectures and conversations, to which ladies are admitted:—Monday, November 8th, on the Physiology of the Brain and Nervous System, by Dr Elliotson. Monday, December 13th, on the Animal Propensities, by Mr Logan. Monday, January 10th, on the Moral Feelings, by Mr Symes. Monday, February 14th, on the Intellectual Faculties, by Mr Churchill. Monday, March 14th, Phrenology the Philosophy of the Mind, by Mr Atkinson. Monday, April 11th, Growth, Changes of Form, and Methods of Measuring the Head, by Mr Hawkins. Monday, May 9th, Applications of Phrenology, by Dr Elliotson. The chair is taken at eight o'clock.

Phrenological Class, London Mechanics' Institute.—The progress of Phrenology in this Institute during the past year has been encouraging. The lectures delivered in August last, on the principles of Phrenology, were well attended; the class received an accession of members; and the works on phrenology in the general library have been well circulated. Most of the classes contain a fair sprinkling of phrenologists; upwards of one-third of the directors of the Institute are avowed phrenologists; and at least one-third of the teachers profess a belief in the science. Much of this favourable progress is ascribable to the exposition of phrenological philosophy so ably afforded by Combe's "Constitution of Man"—a work which has effectively shewn that the essence of phrenology does not consist in mere "bump-feeling," but that in an obedience to its injunctions is involved the happiness of man. It is this which has attracted men of moral and intellectual capacity to our ranks—men who had heretofore been withheld from the study of the science by the quackery of advertising bump-feelers, whose lavish flattery has made manliness revolt, and whose ignorance or distortion of the plainest doctrines of the science has made it appear a mass of incongruous absurdity. One of these pretenders, who, with his mother, favours the northern counties with his prelections, recently visited Carlisle. He issued flaming placards, indicating the possession of self-esteem and ignorance in equal proportions, and succeeded in entrapping many unwary persons. He manipulated a relation of mine, and intimated that she had had a love-disappointment; this fact he said that he had arrived at phrenologically, and hence I was not at all surprised when the enquiry was made—"By what combination of organs was the fact indicated?" Such are the gipsy-tricks of perambulating phrenologists; and it behoves us, as we love the science, and desire its prosperity, to repudiate and denounce these men.

The following are the heads of the principal subjects discussed by the class during the past year:—On the history and present aspect of phrenology—On the rationale of death—Punishment—On the politico-economical theories of Robert Owen tested by phrenology—On the nature and influence of the temperaments—On physiological and metaphysical objections to phrenology—On the origin of love of the past—On memory and judgment phrenologically analysed—On the government of the animal faculties—On Sunday-school education—On the best method of disseminating phrenology—On the influence of Hope on social progress—On mechanical aids to practical manipulation—On criminal legislation—On the growth of the head—On the selection of keepers in lunatic asylums—On the organs employed in poetic composition—On the improveability of man—On the influence of Ideality on the mental character—And four lectures on the structure of the brain, by Dr Rosenthal, which were illustrated by most elaborate dissections.

January 1842.

E. J. HYTCHE.

Bristol.—A public controversy on Phrenology took place in the Assembly Room here in January last, between Mr Jonathan Barber, lecturer on that subject, and Mr Brindley, a disputant who has gained some notoriety by his labours in opposition to Socialism. The discussion excited great interest, and was very numerously attended; but it came abruptly to a close, in consequence, we understand, of an indecorous ebullition of personal feeling on the part of the anti-phrenologist. We hoped to be able to publish a report of it in this Number; but as some expected documents have not yet reached us, it cannot appear till our next. We learn that

the chief or only foundation of Mr Brindley's objections was the want of parallelism of the tables of the skull,—a foundation which, we hardly need say, was speedily and satisfactorily undermined. Mr Barber subsequently delivered a course of lectures, of which we find the following notice in the *Bristol Mercury* of 5th March:—"PHRENOLOGY.—On Wednesday evening, Mr Barber concluded his second course of lectures on this interesting science, at Mr Davey's room, in Broad Street. The audience, as during the former course, was numerous, respectable, and intelligent, and appeared highly gratified by the lucid and able manner in which the lecturer treated his subject. At the close of the last lecture, the Rev. W. Seaton, minister of St John's, Bedminster, moved a vote of thanks to Mr Barber, which was cordially responded to by the audience. Mr Seaton also expressed himself a believer in the leading doctrines of Phrenology, which he regarded as a most important science; and that, so far from its principles being opposed to true religion, he thought that, if fairly and candidly considered, they would be found to harmonize most perfectly with it; and these opinions, he (Mr S.) stated, were shared by many of his brother clergymen." Mr Barber is at present delivering a third course, attended by about four hundred auditors.

Liverpool.—Extract from the Annual Report of the Liverpool Mechanics' Institution, 27th February 1842:—"Since last annual meeting a phrenological class has been conducted gratuitously by Mr Connon, of whose ability former committees have spoken in deservedly high terms. It meets every Monday evening. During the whole course, constant reference has been made to the works of the most celebrated metaphysicians, so that those who have been regular in their attendance have been instructed not only in phrenology, but also to a considerable extent in the philosophy of the human mind as ascertained by reflection on consciousness. The conduct of all the pupils (about fifteen in number) has been very satisfactory, and the progress of many has been great."

Devizes.—In December 1841, three lectures on Phrenology were delivered in the Literary and Scientific Institution, by Mr J. J. Fox. They are noticed in the *Wiltshire Independent* of 16th, 23d, and 30th December. The first lecture "was listened to with much attention, and gave great satisfaction to a numerous audience; additional interest was afforded by the exhibition of some excellent drawings and models. Notice was given that Mr Fox would resume the subject on the two following Thursdays, and we have no doubt, from the interest excited by the first lecture, of a large attendance upon the second and third. From the judgment manifested by Mr Fox in the introduction of the subject, we feel assured that the prejudice existing in the minds of any of his auditors (and we know that prejudice does prevail with some) must have been much abated. Whatever may be the claims of phrenology to be ranked as an established science, it is, at all events, deserving the attention both of the philosopher and the philanthropist." At the conclusion of the third lecture, Mr Fox stated, that "although so much had been said on the science, the subject was by no means exhausted; there was matter sufficient for several other lectures, and he promised that he would, next session, resume the subject, if there was any desire on the part of his audience for farther information."

Chester.—On 1st March, a lecture on the principles of Phrenology was delivered by Mr J. Snape, in the Chester Mechanics' Institution.

Sheffield.—This town was lately visited by a head-manipulating quack, who, in spite of his evident incompetency, enjoyed no small amount of public patronage. On his arrival in Sheffield, he called himself "Bu

Shea;" afterwards, "Doctor Bu Shea, Membre de la Société Phrénologique;" then, "Henri Bu Shea, LL.D.;" and lastly, "Dr Henry Beau Sheau!" A few weeks ago he essayed, for the first time in Sheffield, a public lecture, "inviting discussion." A gentleman who had paid considerable attention to phrenology attended, and, availing himself of the liberty to ask questions, cross-examined the lecturer, to the great amusement of the audience, and exposure of the hollowness of the "doctor's" scientific pretensions. As a sample of his knowledge, we may state that he divides the faculties thus: 1. Animal; 2. Moral; 3. Perceptive or Reflective; 4. Intellectual. "Of the entire lecture," says our informant, "I can truly say, that I never saw so pitiful an exhibition of mental imbecility, disgusting coarseness, and low jack-puddingism." Next morning, the lecturer decamped.

Kendal.—On 3d December last, Dr Proudfoot read a paper against Phrenology to the members of the Kendal Natural Society; to whom it was again read on 10th January. It is pretty fully reported in the *Kendal Mercury* of 15th January. Some of the Doctor's statements were, that "it is impossible to ascertain the size of the brain from the outer form of the skull;" that "over the eyebrows, where the phrenologists place seventeen different faculties, the skull itself is nearly solid; then the skull is divided into two distinct plates, with a cellular substance between them, and there is not the most distant resemblance between the internal and external plates;" that "the brain is covered with four membranes or webs, one of which is of considerable thickness, and each operates to restrain the pressure of the brain upon the internal plate of the skull" (!); and that "he would not dwell on the details of the science, as the fact that the protrusions of the brain had no correspondence with the protrusions of the skull, cut away at once the ground from under phrenologists." At this time of day it is unnecessary to waste a single word in reply to such antiquated objections. Dr P. asks, "Why is it we have not a special faculty for the love of parents, another for the love of sisters, another of cousins? and wherefore has Nature failed to provide organs for securing a good understanding between step-mothers and step-daughters?" Doubtless Nature thought that a good understanding between step-mothers and step-daughters was less essential to the preservation and well-being of the human race than the affection of parents towards their offspring, and that it might safely be allowed to spring from the social faculties in general, without the addition of a *special* source. As to the love of parents by children, we refer to some extracts on "Parental and Filial Affection" in a subsequent page.—With regard to Dr P.'s assertion, that "time occasions great changes in the conformation of the brain and of the skull, without causing corresponding changes in the disposition and temper," we call on him to produce reports of such cases, drawn up by competent observers, enjoying and making use of sufficient opportunities to ascertain the facts.—He misrepresents the phrenologists, in ascribing to them the averment that, previously to their attempt to divide the head into portions connected with different faculties, no such attempt had ever been made: So far is this from being the case, that Gall has given a history of the fanciful attempts of his predecessors; and additional details, originally published in the second volume of this Journal (p. 378), are repeated in the works of Combe and Elliotson.—Again, he asks, "Would it be safe for a man to set up to read the hearts and to judge of the impulses of his fellows? Much misery and confusion must necessarily ensue from such a source;"—which is equivalent to saying, that the more a person endeavours to learn of the dispositions of his neighbours, and the more he actually ascertains respecting them, the greater amount of misery and confusion will he reap for his pains.—At the conclusion of the paper,

the Rev. Edward Hawkes rose, and ably defended phrenology in a speech of considerable length, which we regret that our limits forbid us to quote. Dr Proudfoot, in his rejoinder, asserted that "the opinions of the phrenologists are generally rejected by the medical profession, both in England and on the Continent;"—whereas the leading medical journals of England are favourable to those opinions; and, moreover, it has been shewn by Mr Watson, in his *Statistics of Phrenology*, that the proportions of medical to non-medical phrenologists are these:—Members of phrenological societies, 1 in 6; authors and writers on phrenology, 2 in 3; lecturers, probably more than 2 in 3—being a great preponderance of medical phrenologists, compared with their number in the community at large.

Leeds.—In January last, a paper on phrenology was read by Mr Cook before the members of the Literary Institution. It was very well received, and there seemed to be a decided change in the general opinion of the members with respect to phrenology, compared with that evinced on a similar occasion about two years ago.

High School of Glasgow.—Many of our readers are aware that the English department of this Institution is conducted on the principles of phrenological philosophy, though the science itself has not hitherto been publicly taught in any of the classes. At present, however, the experiment is in progress, and bids fair to be attended with the best results. The class under instruction is the senior one of the department, embracing fifty-one pupils, from fourteen to twenty years of age. The course of study embraces the higher parts of Grammar and Composition, *Mental Philosophy*, Logic, and Rhetoric, and occupies ten months, exclusive of vacation. The *Mental Philosophy* is that of Gall, Spurzheim, and Combe, and succeeding as it does in the order of the course to the comparatively dry details of grammatical analysis, it has excited the deepest interest in the minds of the students. Four hours a-week are devoted to the subject, and as the instruction is by illustrated conversational lecture, oral examination, and daily written exercises, the course, though brief, will be thorough and practical. No text-book is imperative, but nearly all the pupils have supplied themselves with the admirable articles (Nos. 59 and 60) in *Chambers's Information for the People*, or with Combe's *Outlines*.

Phrenology and Animal Magnetism.—Some astounding announcements have lately been made by Dr Buchanan of Louisville, U. S., and Mr John B. W. S. Gardner of Roche Court, Hants,—two phrenologists acting independently of and, it is said, unknown to each other, and whose observations are reported to have led to the same results. According to these gentlemen, it is possible to excite or suspend the action of any cerebral organ by means of animal magnetism directed to the part of the head where the organ is situated; and numerous cases are given in illustration of the alleged fact. Dr B. is characterised by the American papers as a gentleman of learning and intelligence, and we understand that Mr Gardiner also, though not a medical man, is talented, honourable, and well-informed. The averments of the latter are corroborated by Dr W. C. Engledue of Portsmouth; and Dr Elliotson has brought the subject under the notice of the London Phrenological Society. Before publishing any details, we think it becoming to wait for farther information on so novel and marvellous a subject. Though perfectly open to conviction by evidence, we confess ourselves to be at present among the incredulous.

Dr Roberton's Legacy to the Phrenological Society.—The decision of the French court, finding itself incompetent to try the suit instituted by the Society against Dr Robert Verity the executor of Dr Roberton, has lately

been appealed against, on grounds which, it is hoped, will lead to a reversal of the judgment.

Concert at the Crichton Institution for the Insane.—There is probably no asylum in Britain in which there are greater or more successful efforts made than in this one, in order that the patients may enjoy as many of the comforts and pleasures of social life as is compatible with their condition. At every public exhibition, we observe parties from the establishment, and seldom a day passes in which the *airing* carriages belonging to it may not be seen passing along our streets. These vehicles contain those who, a few years ago, would have seen nothing from day to day but the gloomy walls of a cell, or the sky above the narrow precincts of a cheerless airing-ground. The condition of the maniac is improved indeed, and every scheme that benevolence suggests for its farther improvement, has the strongest claims upon the attention of the community; for every thing that promotes the happiness of the most unfortunate of our race will be hailed with pleasure by a rightly constituted mind. On Thursday evening, being the anniversary of the Queen's marriage, nearly one hundred individuals of both sexes assembled in the great hall of the Crichton Institution, to hear a concert of vocal and instrumental music. It will hardly be believed that such an audience would remain orderly for a moment, or that it would be safe to bring them together. Experience, however, has triumphantly proved, oftener than once, that in this Asylum a concert is not only possible, but productive of the best effects—that of enlivening and cheering the minds of the patients; and although a considerable time elapsed between the meeting of the assembly and the arrival of the musicians, not the least disturbance occurred—all were as quiet and orderly as if they had been attending a public meeting in *other days*. The individual from whom we received our information could scarcely believe that he was surrounded by those who were unfit to mingle in society. When the instrumental band struck up the first tune, every eye was fixed upon them, all was attention, and an expression of pleasure began to beam upon the countenances of many. It may be said, therefore, with perfect truth, that music can attract the attention, absorb the feelings, and soothe the soul of the maniac. The same attention was paid to every tune, and the same pleasure manifested throughout the evening. The pieces were well selected, and executed in a manner that did the highest credit to the performers. The following beautiful songs were sung, most of which were accompanied by the piano or the violin. "The Flowers of the Forest," "Jock of Hazeldean," "Kelvin Grove," "The Boatie Rows," "Roderic M'Alpin," "My ain Fireside," and some others, which our informant does not remember. But he specially mentions, that a more respectably dressed, or more attentive audience, seldom attends a musical concert in our Assembly Rooms, and that nothing but seeing could have made him believe that such a one could have been composed of the inmates of a lunatic asylum. He naturally expected that such a number of individuals, labouring under mental derangement, would not disperse with so much quietness as they had observed when under the influence of the music—that the well-executed solos and glees had chained down their wandering thoughts; but that now, when they were about to separate, he would witness a scene of tumult and confusion. He was deceived: The assembly disappeared from before him as orderly and quietly as the people leave one of our churches. The whole scene, from beginning to end, was well calculated to inspire those who take an interest in the treatment of the insane, with feelings peculiarly gratifying, inasmuch as it shewed the degree of liberty that can be given to the maniac with safety, and the great pleasure which he derives from company, novelty, and music.—*Dumfries Courier*, 21st Feb. 1842.

Concentrativeness of the Jews.—The note contained in the last Number of the *Phrenological Journal* (page 94) respecting the mental characteristics of the Jews, seems to imply that most of their mental qualities are referable to Firmness alone; whereas, from its nature, the phenomenon described could not be produced without the intervention of Concentrativeness. The Jews doubtlessly display much Firmness; for without that quality they could not have withstood the varied forms of persecution by which they have been beset, whether exhibited, as in former times, in unjust confiscation of their property, torture, and death, or, as in these days, in deprivation of specific civil rights. Yet, however unbending their dispositions, as a large endowment of Firmness would enable them to be; still, unless great general energy had been superadded—such as is imparted by large brain and active temperament—they must have sunk before the superior power of their oppressors; just as the small-brained Mexican sank before the Spaniard, or as the feeble aborigines are crouching before the European emigrant.

But this is not all. The Jews are characterized by one pervading principle, which has done more than any other characteristic to preserve their nationality,—I refer to their belief that they shall re-inhabit the land of their ancestors. So far, indeed, does their love of country prevail, that many import the earth of Jerusalem to line their graves; and all, whatever their civil station, and even though they may have abandoned their creed, anticipate the time of Jewish re-union, when Judea shall resume its ancient glory; and perchance the long cultivation of the feeling, and its consequent intensity, may ultimately secure the fulfilment of the anticipation. Now, here we find not only a persistence in an opinion, but a continuity and a oneness of idea, and *that* an idea to which most of their habits bear some reference, and one which centuries of persecution have been unable to eradicate or lessen. Hence, unless we are disposed to consider that Firmness can not only produce perseverance, but devotion of the energies to the attainment of one great object, we must refer their distinctive characteristic to some other source. This will be found in powerful feelings of Inhabitiveness and Concentrativeness—the one producing love of place, and the latter imparting a tendency to continuity of thought and feeling on one specific object or idea—which in their case is developed in a continuous love of one locality, and a willingness to suffer any evil rather than forego their nationality. The heads of the Jews present the region assigned to these organs largely developed. Firmness is also large; and the bilious temperament predominates.

E. J. HYTCHE.

Contrasts in Character.—Boswell, in his *Life of Johnson*, expresses wonder at Milton (whom Johnson calls an acrimonious and surly republican) writing with sublimity, beauty, gaiety, &c., and adds;—"It is a proof that in the human mind the departments of judgment and imagination, perception and temper, may sometimes be divided by strong partitions; and that the light and shade in the same character may be kept so distinct as never to be blended."—*Croker's edit.*, vol. iv. p. 409.

Phrenologists and Metaphysicians.—In a very amusing work entitled "A Challenge to Phrenologists," there is at least one passage which deserves the special attention of phrenologists. "We cannot but conclude with a prayer, that the really thoughtful among this new sect of philosophy, may carefully examine what we have, in perfect good faith, advanced, and if they cannot then agree with us, let them not offend the world, or throw back the success of their own scheme, by affecting to make light of the mighty, yet modest, questioners of nature that are departed from among us, the Hobbes, the Bacons, the Lockes, the Browns, the Stewarts, who, whether

they have worked as much good as their admirers assert them to have done, or not, are, at any rate, all but universally voted to have been among the greatest men that ever lived in the tide of time, and therefore no fitting butts for phrenological pleasantry. Let the cultivators of the new philosophy rather study themselves, by the contemplations of those great thinkers, who, if they were conscious of their inadequacy to a mastery of that prime puzzle man, yet sought not by vain guesses and wild assumptions to conceal their incompetency, but were content to admit, at the end of their labours, that

‘ There were more things in heaven and earth,
Than were dreamt of in their philosophy.’ ”

W. B. H.

Hereditary Transmission of Disease.—The following quotation is from one of a series of articles which appeared in February 1839 in the *Royal Leamington Spa Chronicle*, with the signature of T. B. J., and which were evidently written not from theory, but from minute knowledge of and deep interest in the subject itself. In treating of the “breaking down” of race-horses from premature running and forcing, the writer says—“It is an acknowledged fact that ‘like produces like,’ and if we apply this maxim to the present investigation, we shall perceive how forcibly it becomes illustrated. From what has been precedingly observed, the reader will have become aware that our racers, for the most part, leave the turf with diseased fore legs; and as they are thus placed in the breeding stud, unsound stock is reasonably to be expected. And as in the mysterious process of procreation, the preponderating influence of the male is unquestionable, so great injury is likely to result accordingly. Velocipede, as a racer, presented an almost faultless conformation, and (as a necessary consequence) manifested superior speed; but he had not raced any considerable time ere suspicious symptoms were observed in his fore-legs and fore-feet; he nevertheless continued in the training stable, and contrived to win the Liverpool cup with his legs in a very crazy state. As he had shewn superior speed on the course, he became a favourite stallion, but to nearly the whole of his stock has communicated the disease which compelled him to give up his racing career when he had attained his fourth year. Queen of Trumps, the fleetest filly of modern days, I think of any period, whose competitors could never press her beyond her mere rate, possessed greater speed than her sire Velocipede, but unfortunately inherited his unsoundness. Early in life her feet appeared suspicious, but she went through training and acquired an extraordinary character as a racer. She won the Oaks and Doncaster St Leger; like a flaming meteor she shone with dazzling lustre for a short time and disappeared.” The lesson furnished by these cases is as applicable to the brain as to the limbs.

Parental and Filial Affection.—“However the author of nature may have instilled affection into the breast of a parent as the means of preserving the race from destruction, we must allow, that the corresponding sentiment in the mind of the offspring is merely the effect of a long-continued course of care, partiality, and tenderness.”—*William Roscoe*, in his *Life* by his Son, i. 94.

“The knowledge that it is the tendency of affection rather to descend than to ascend, seems of considerable importance in the regulation of parental feeling. Fuller, in his chapter on moderation, says, ‘As love does descend,’ &c. Du Moulin, in his work on Peace and Content, says, ‘Of children expect no good but the satisfaction to have done them good and to see them do well for themselves; for in this relation the nature of beneficence is to descend, seldom to remount.’ Bishop Taylor, in his *Life* of

Christ, when speaking of mothers who do not suckle their own children, says, 'And if love descends more strongly than it ascends, and commonly falls from the parent upon the children in cataracts, and returns back again up to the parents but in small dews; if the child's affection keeps the same proportions towards such unkind mothers, it will be as little as atoms in the sun, and never express itself but when the mother needs it not, that is, in the sunshine of a clear fortune.' Is not the expectation, that affection should ascend, often a cause of misery?"—*Basil Montague*, in his *Selections from the Works of Taylor, &c.* 4th edition, p. 243, note.

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EDINBURGH, 1st April 1842.

THE
PHRENOLOGICAL JOURNAL.

No. LXXII.

NEW SERIES.—No. XIX.

I. MISCELLANEOUS PAPERS.

- I. *Address delivered at the Anniversary Celebration of the Birth of Dr Spurzheim, and the Organization of the Boston Phrenological Society, December 31, 1839.* By GEORGE COMBE.*

WE have met together this evening, on the anniversary of the birth-day of Dr Spurzheim, to celebrate the institution of the Phrenological Society of Boston; and the Council of the Society has done me the honour to request me to address you on the occasion. It affords me much gratification to comply with their desire. In addressing an American audience, the speaker enjoys the inestimable advantage of breathing the air of liberty; and only in such an atmosphere can Phrenology flourish. Napoleon, on his imperial throne, sustained by five hundred thousand armed men, and ruling over the prostrate continent of Europe, feared the philosophers who investigated the laws of mind and of morals. He hated metaphysicians, moralists, and even jurists; all, in short, who sought to analyze the nature of man, with a view to discover his rights as well as his duties. He seems to have had an instinctive consciousness that, if the human mind were examined in its elements, and the dictates of its highest powers given forth, the conqueror and the tyrant would stand condemned before them. He disliked Phrenology in particular, and gave significant hints to Cuvier and other men of science of the French capi-

* This Address was printed in America two years since by the Society before which it was delivered, and a few copies have been circulated in Britain; as, however, it must be new to the great majority of our readers, we have thought that its republication in this place might be generally acceptable.—EDITOR.

tal, that they should lend no countenance to its doctrines and pretensions. There was good reason for this conduct. Had the French people been taught the sphere of activity of every faculty, instructed in the great doctrine of the supremacy of the moral sentiments, and enabled to appreciate the unerring certainty of that law of the Creator which binds misery to all abuses of our faculties, and enjoyment to their legitimate action, the horrible drama of the Revolution could not have been enacted, and the blood-stained empire of Napoleon could never have arisen to scourge and to terrify the nations of Europe. Even the milder despots of Austria and Prussia, whose sway is more paternal than that of the military conqueror,—sovereigns who walk forth unarmed, unguarded, nay, even unattended, among their people, and who, by their personal virtues and the halo of a long line of ancestors, secure the willing homage of their subjects,—even *they* repel the philosophy of mind. They honour the philosophers who investigate matter; but the laws of the material universe tell no tale of human rights. When, however, the mental philosopher speaks of man's intellectual powers, as instruments bestowed on him with the injunction, "*Try all things, and hold fast by that which is good;*" when he unfolds sentiments of Benevolence, Veneration, and Justice, under the inspirations of which men feel that they have rights to enjoy, as well as duties to perform; when he proclaims to the political bondsman that kings, emperors, and all terrestrial powers, are themselves bound by the dictates of these heavenly emotions, and that a God of beneficence and justice knows no distinction in moral rights and duties between the prince and the peasant; then the philosopher of mind becomes odious to the despot, whose maxims of government will not sustain the scrutiny of this searching analysis. The emperor of Austria forbade Dr Gall to lecture, and virtually banished him from his dominions. To this day, subjects of Austria and Prussia sigh while they say, "Phrenology is the philosophy of a free country; here it cannot flourish."

Where, then, should this last and best gift of individual genius to the family of mankind bring forth its blessed fruits in richer abundance than in this land of freedom? Let us, then, enjoy this liberty, and let us speak of Dr Gall's discovery in terms, if they can be found, adequate to its importance. In addressing a miscellaneous audience, a phrenologist is bound, by the dictates of correct taste, to moderate his language, and veil the pretensions of his science, to such an extent as not to shock too rudely the perhaps unfavourable prepossessions of those before whom he appears. But on this

occasion I regard myself as a phrenologist (whose opinions are founded on nearly twenty-five years' observation and reflection in various regions of the globe) addressing a society of phrenologists, whose convictions of the great truths of the science are as firmly rooted as my own. While to them I may present ideas to which the tyro in the study is not prepared to assent, I assure *him* that I cordially allow him to withhold his approval; but I also very respectfully solicit him to restrain his condemnation, and not to measure the solidity of the foundations on which *our* convictions are built, by the slender soil on which he yet rests his own.

It is seven years since this Society was instituted (Dec. 31. 1832) for the cultivation and diffusion of Phrenology; but after some vigorous exertions, displaying zeal and talent in its members, its active existence has ceased. In its splendid but brief career, it does not stand forth a monument of that youthful passion for novelty, and that lack of perseverance amidst obstacles and difficulties, which are said to characterize the people of this young and ardent nation; but it has yielded to the operation of causes which have equally, and in the same manner, paralyzed several of the Phrenological Societies of Europe. It may be interesting to trace the nature of these adverse influences whose effects we deplore.

I observe, then, that many Phrenological Societies have perished from having prescribed to themselves objects of too limited a nature. They have undertaken chiefly the duty of verifying the observations of Drs Gall and Spurzheim, and other phrenologists, in regard to the organs of the mind, and their functions; and have too seldom embraced in their sphere of action the application of this knowledge to the physical, moral, and intellectual improvement of themselves and their fellow men; or, if this aim *have* found a place in the constitution and laws, it has not practically been carried into effect.

A knowledge of the organs and their functions, and of the effects of their combinations, is indispensable as a foundation for the useful application of phrenological science; and I have long been convinced by observation, that the confidence of each disciple in the power of his principles, and also his capacity of applying them to advantage, bears a relation to the minuteness of his acquaintance with organology. Far from undervaluing, therefore, the importance of an extensive series of observations in organology, I emphatically declare my experience to be, that it is the *first* step towards the formation of a true phrenologist; it is the *second* step, and it is the *third* step, towards the formation of a true phrenologist. If any

Christ, when speaking of mothers who do not suckle their own children, says, 'And if love descends more strongly than it ascends, and commonly falls from the parent upon the children in cataracts, and returns back again up to the parents but in small dews; if the child's affection keeps the same proportions towards such unkind mothers, it will be as little as atoms in the sun, and never express itself but when the mother needs it not, that is, in the sunshine of a clear fortune.' Is not the expectation, that affection should ascend, often a cause of misery?"—*Basil Montague*, in his *Selections from the Works of Taylor*, &c. 4th edition, p. 243, note.

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Newspapers Received.—Wiltshire Independent, Dec. 16, 23, 30.—Kendal Mercury, Jan. 15.—Hampshire Telegraph, Jan. 7.—Dumfries Courier, Feb. 21.—Tyne Pilot, Feb. 25.—Aberdeen Herald, Feb. 19.

To Correspondents.—The communication from St Ubes, "on the connexion and dependence of the various parts of the brain and body," consists, to so great an extent, of mere conjectures, that its publication would be of little utility.—We are unable to insert the communication of Mr Kiste.—An article on the skulls of the extinct race of Peruvians, and several reviews of books, are unavoidably deferred till our next Number.—Additional communications from W. M. A. will be acceptable.

Communications for the Editor (prepaid) may be addressed to Mr Robert Cox, 25 Rutland Street, Edinburgh. Books or parcels, too heavy for the post, may be left (free of expense) with the London publishers, Messrs Simpkin, Marshall & Co., Stationers' Hall Court.—Articles intended for the next following Number must always be with the Editor six weeks before the day of publication. Communications for the section of "INTELLIGENCE," and also Advertisements, should be in hand at least a fortnight before the same day. Charges for advertising:—eight lines, 6s.; twelve lines, 7s. 6d.; every additional line, 6d.; half a page, 14s.; a whole page, 25s. Advertisements may be sent to the publishers in Edinburgh or London.

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THE
PHRENOLOGICAL JOURNAL.

No. LXXII.

NEW SERIES.—No. XIX.

2. MISCELLANEOUS PAPERS.

- I. *Address delivered at the Anniversary Celebration of the Birth of Dr Spurzheim, and the Organization of the Boston Phrenological Society, December 31, 1839.* By GEORGE COMBE.*

WE have met together this evening, on the anniversary of the birth-day of Dr Spurzheim, to celebrate the institution of the Phrenological Society of Boston ; and the Council of the Society has done me the honour to request me to address you on the occasion. It affords me much gratification to comply with their desire. In addressing an American audience, the speaker enjoys the inestimable advantage of breathing the air of liberty ; and only in such an atmosphere can Phrenology flourish. Napoleon, on his imperial throne, sustained by five hundred thousand armed men, and ruling over the prostrate continent of Europe, feared the philosophers who investigated the laws of mind and of morals. He hated metaphysicians, moralists, and even jurists ; all, in short, who sought to analyze the nature of man, with a view to discover his rights as well as his duties. He seems to have had an instinctive consciousness that, if the human mind were examined in its elements, and the dictates of its highest powers given forth, the conqueror and the tyrant would stand condemned before them. He disliked Phrenology in particular, and gave significant hints to Cuvier and other men of science of the French capi-

* This Address was printed in America two years since by the Society before which it was delivered, and a few copies have been circulated in Britain ; as, however, it must be new to the great majority of our readers, we have thought that its republication in this place might be generally acceptable.—EDITOR.

tal, that they should lend no countenance to its doctrines and pretensions. There was good reason for this conduct. Had the French people been taught the sphere of activity of every faculty, instructed in the great doctrine of the supremacy of the moral sentiments, and enabled to appreciate the unerring certainty of that law of the Creator which binds misery to all abuses of our faculties, and enjoyment to their legitimate action, the horrible drama of the Revolution could not have been enacted, and the blood-stained empire of Napoleon could never have arisen to scourge and to terrify the nations of Europe. Even the milder despots of Austria and Prussia, whose sway is more paternal than that of the military conqueror,—sovereigns who walk forth unarmed, unguarded, nay, even unattended, among their people, and who, by their personal virtues and the halo of a long line of ancestors, secure the willing homage of their subjects,—even *they* repel the philosophy of mind. They honour the philosophers who investigate matter; but the laws of the material universe tell no tale of human rights. When, however, the mental philosopher speaks of man's intellectual powers, as instruments bestowed on him with the injunction, "*Try all things, and hold fast by that which is good;*" when he unfolds sentiments of Benevolence, Veneration, and Justice, under the inspirations of which men feel that they have rights to enjoy, as well as duties to perform; when he proclaims to the political bondsman that kings, emperors, and all terrestrial powers, are themselves bound by the dictates of these heavenly emotions, and that a God of beneficence and justice knows no distinction in moral rights and duties between the prince and the peasant; then the philosopher of mind becomes odious to the despot, whose maxims of government will not sustain the scrutiny of this searching analysis. The emperor of Austria forbade Dr Gall to lecture, and virtually banished him from his dominions. To this day, subjects of Austria and Prussia sigh while they say, "Phrenology is the philosophy of a free country; here it cannot flourish."

Where, then, should this last and best gift of individual genius to the family of mankind bring forth its blessed fruits in richer abundance than in this land of freedom? Let us, then, enjoy this liberty, and let us speak of Dr Gall's discovery in terms, if they can be found, adequate to its importance. In addressing a miscellaneous audience, a phrenologist is bound, by the dictates of correct taste, to moderate his language, and veil the pretensions of his science, to such an extent as not to shock too rudely the perhaps unfavourable prepossessions of those before whom he appears. But on this

occasion I regard myself as a phrenologist (whose opinions are founded on nearly twenty-five years' observation and reflection in various regions of the globe) addressing a society of phrenologists, whose convictions of the great truths of the science are as firmly rooted as my own. While to them I may present ideas to which the tyro in the study is not prepared to assent, I assure *him* that I cordially allow him to withhold his approval; but I also very respectfully solicit him to restrain his condemnation, and not to measure the solidity of the foundations on which *our* convictions are built, by the slender soil on which he yet rests his own.

It is seven years since this Society was instituted (Dec. 31. 1832) for the cultivation and diffusion of Phrenology; but after some vigorous exertions, displaying zeal and talent in its members, its active existence has ceased. In its splendid but brief career, it does not stand forth a monument of that youthful passion for novelty, and that lack of perseverance amidst obstacles and difficulties, which are said to characterize the people of this young and ardent nation; but it has yielded to the operation of causes which have equally, and in the same manner, paralyzed several of the Phrenological Societies of Europe. It may be interesting to trace the nature of these adverse influences whose effects we deplore.

I observe, then, that many Phrenological Societies have perished from having prescribed to themselves objects of too limited a nature. They have undertaken chiefly the duty of verifying the observations of Drs Gall and Spurzheim, and other phrenologists, in regard to the organs of the mind, and their functions; and have too seldom embraced in their sphere of action the application of this knowledge to the physical, moral, and intellectual improvement of themselves and their fellow men; or, if this aim *have* found a place in the constitution and laws, it has not practically been carried into effect.

A knowledge of the organs and their functions, and of the effects of their combinations, is indispensable as a foundation for the useful application of phrenological science; and I have long been convinced by observation, that the confidence of each disciple in the power of his principles, and also his capacity of applying them to advantage, bears a relation to the minuteness of his acquaintance with organology. Far from undervaluing, therefore, the importance of an extensive series of observations in organology, I emphatically declare my experience to be, that it is the *first* step towards the formation of a true phrenologist; it is the *second* step, and it is the *third* step, towards the formation of a true phrenologist. If any

cause has contributed more than another to the distinction acquired by Edinburgh as a school of this science, it has been the rule established in our Society, from its foundation, that the cerebral development of every member should be taken by a committee of the Society, and recorded; and that extensive observations of heads, skulls, and casts should be practised. The Phrenological Society of Aberdeen has travelled in the same path; and it also has been eminently successful. Again, therefore, I say that I place the highest value on the practical department of the science.

But experience induces me to add that this department is comparatively narrow. In a few years, an individual of ordinary powers of observation may attain to a full knowledge of organology, and a thorough conviction of its truth; and if he stop there, he will resemble a geometrician, who, after having mastered all the demonstrations of Euclid, shrinks from applying them. Such a geometrician would find the constant repetition of these uninteresting, because they had become familiar, and led to no practical results. The same rule holds good in Phrenology. To sustain our interest we must proceed to apply our principles; and here our serious difficulties commence. The most timid mind may employ itself, in the secret recesses of its own study, in observing casts, or in manipulating living heads, and suffer no inconvenience, except perhaps a passing smile of derision from some good-natured friend, who esteems his own ignorance more excellent than the other's knowledge. But when the phrenologist advances openly to the application of the principles of his science, then the din of conflict arises. He invades other men's prejudices, and sometimes assails what they conceive to be their privileges; for there are persons who claim as a privilege the profits which they may make by public errors. He is then opposed, misrepresented, and abused; and as he is conscious that his object is one of beneficence, he is unwilling to accept a reformer's recompense; he discontinues his exertions, and the society becomes dormant. This fate has overtaken several phrenological associations in Britain. They have shrunk from the practical application of their principles, and consequently sleep.

The time is not yet, but will probably soon arrive, for re-uscitating them into active existence, as societies for physiological, moral, and intellectual reform; and I venture to prophesy, that whenever they shall embody a reasonable number of members pledged to the application of the principles of Phrenology in these great fields of usefulness, their success will be conspicuous and cheering.

The human mind is regulated by uniform laws, and the same events happen, in similar circumstances, in the United States and in Britain. In several of the cities of this country which I have visited, I have found that Phrenological Societies have existed, flourished for a brief season, and then fallen into decay ; and in general, the cause appears to me to have been the same. The members soon became satisfied that the great principles of Phrenology are true ; but they were not prepared to proceed to the practical application of them in any department of usefulness. They saw a public that was either hostile or indifferent to them, and they did not feel in themselves sufficient power to cope with these adverse feelings. The consequence has been that Phrenology has seemed to fall asleep. Its enemies have thought that it was dead. But when did any great truth, fraught with blessings to the human race, perish ? The ignorant and despotic priesthood that sent Galileo to a dungeon, congratulated themselves that they had cut up by the root the heresy of the earth's revolution on its axis. But how delusive was their dream, how absurd their estimate of their own power ! The Creator had swung the globe on high, and impelled it on its diurnal and on its annual course. Copernicus, Galileo, and Newton, were guilty only of calling the attention of mankind to what the Creator had done. If the nations were offended, and averted their eyes, worlds did not therefore cease to roll ; men, alone, suffered the consequences of their conduct. They remained buried in a stolid and barbarous ignorance, which led them to wage horrible wars with each other ; to believe in witchcraft ; to bow their necks, in all the helpless imbecility of intellectual darkness, to ruthless tyrants in church and state. So it ever must be when natural truths—in other words, the works of the Creator—are discovered, presented to mankind, and rejected. They do not cease to exist and to act. Truth cannot die. Accordingly, in this country, I find Phrenology flourishing in astonishing vigour as a practical art. Wherever I have gone, I have found men who call themselves practical phrenologists, exciting a vulgar curiosity concerning the science : examining heads ; predieating character ; using it, in short, as a species of palmistry or astrology, and extracting, as I have been told, large sums of money from the people, by their skill. I have heard these humble practitioners denounced by educated and philosophical phrenologists, as the great enemies of the science ; as having degraded it, and rendered it disgusting to superior minds. I acknowledge the consequences, and lament them ; but I am disposed to deal charitably with the offenders. *They*

did what higher men left undone : They not only boldly proclaimed their own conviction of the truth of Phrenology, but applied it to the best of their ability. If the educated phrenologists will do the same, they will be more successful ; and they will wipe away this opprobrium from the science, in the only way in which it can be removed,—by substituting a better practice in its place.

I repeat, then, my humble conviction that every Phrenological Society, to be permanently successful, must engage in practical objects ; and I need not mention how wide is the field for the application of our science. The members of this Society are acquainted with many of its departments, such as education, insanity, criminal legislation, prison discipline ; criticism, biblical and profane ; political economy and moral science. To the successful prosecution of all of these, a knowledge of mind is indispensable. But as I am under the necessity of confining my attention, on the present occasion, to a single point, I shall attempt to elucidate one which appears to me to be highly important, and hitherto little considered.

This Society, then, may prepare the public for teaching Phrenology, as the philosophy of mind, in schools. I can conceive it possible for it to establish a school, in which Phrenology should be taught, in its full length and breadth, to the pupils, as one branch of their general education. For example, I would propose to teach them, by the aid of drawings and preparations, the general anatomy of the brain and nervous system ; of the heart, lungs, and blood-vessels ; and of the stomach and other digestive organs. By this instruction I would endeavour to give them clear ideas of the connection between the mind and the body, and of our dependence for health, vigour, and enjoyment, on the condition of the organic system. I would next introduce them to a knowledge of the situations and functions of the different *mental* organs, and their spheres of activity, with the uses and abuses of each. Some of the advantages which I should expect to follow from this instruction, would be these :—

The children would become intelligent co-operators with their parents and teachers, in their own education. At present, great anxiety is expressed by many persons to know the faculties of their children, that they may train them ; but it occurs to few that the most efficient co-operators in this training will be the children themselves, when they know their own constitutions. I am not a father, but I have had considerable experience in training the children of a relative, who lost her husband when a numerous family were young ; and some of my most

intimate friends have been phrenologists, and have trained their children as I did those of my relative, by instructing them in the details of Phrenology from their early years, and teaching them to think and act on the principles which it embodies. We cannot boast of having overcome every evil tendency in our young charges, or supplied every deficiency. My experience leads me to confess that the highest and best gift which a child can inherit, is a well formed and well constituted brain. Where a peculiar combination exists, I know of no method by which its effects can be removed ; and if a feeble or diseased organization be inherited by the child, I have discovered no means by which its mental manifestations can be rendered equal to those of a brain enjoying native health and vigour. I disavow, therefore, all pretensions to the power of perfecting, by means of Phrenology, every individual child : but there are degrees of comparison : there may be good, better, best ; as well as bad, worse, worst. Need I assure the members of this Society, that by teaching to children the functions of the different organs, and the uses and abuses of the different faculties, the good have been rendered strikingly better, and the worst have become less bad ? Wherever the organization has been of a high order—that is, where the quality of the brain was good, and the moral and intellectual organs predominated,—the results have been truly admirable. A few brief remarks will suffice to explain the operation of this kind of instruction.

The organs exist and perform their functions in children as they do in adults. The feelings are first developed ; they are strong, they are blind, and they sometimes conflict. Phrenology enables the child to understand the nature, objects, uses, and relative authority of each. It introduces light and order where darkness and chaos formerly reigned. I can well recollect the painful conflicts which I experienced in my own childhood, and the difficulty which I felt in determining which feeling was right. For example ; having a large Self-esteem, and tolerably good Combativeness and Destructiveness, I was easily offended, and often burned to gratify my feelings of revenge ; but Benevolence and Conscientiousness would whisper that this was wrong. I felt instinctively the opposition between these feelings, but knew not their relative values. I sometimes thought that submission to aggression and forgiveness of injuries were cowardice, and indicated a want of manly spirit ; and if the better principles actually prevailed, I rarely enjoyed the satisfaction of the conscious triumph of virtue. Again ; having Love of Approbation equally large with Self-esteem, I felt in my childhood these two emotions constantly conflicting. Love of Approbation prompted me to acts of vainglory

and boasting, of which Self-esteem and the moral sentiments were soon heartily ashamed. I resolved to correct this fault, and put on a dogged indifference to the opinion of others, which was to me equally unnatural and unsatisfactory, and in itself unamiable. I could not adjust the balance between the two faculties. Nay, not only did this conflict annoy me in childhood, but it persecuted me far on in life, and I was constantly liable to run into an excess of complaisance, to give way to an undignified desire to cultivate favour by compliances, or to fall back on Self-esteem, and set opinion at defiance. Phrenology conferred on me the first internal peace of mind that I experienced; and although I am still conscious of defects in external manners, arising from these disadvantages of youthful training, I now know at least what is the character and value of the different emotions that visit me. I could give many other examples; but these will suffice to render my proposition intelligible, that a knowledge of the faculties may be rendered of the highest utility to children themselves.

Let us suppose that the child whom we are training possesses the most favourable combination of faculties and organs, viz. full animal and large moral and intellectual organs—he will still be conscious of conflicting emotions. The propensities will give desires, perhaps those of sex, or that of property, or those of vanity and ambition, at moments when the sentiments are off their guard, and the intellect treacherous; and evil may be committed, which conscience may subsequently punish, but which might, as it appears to me, have been more successfully resisted, if the young offender had early been made acquainted with the nature of the enemies within him. Not only so, but a knowledge of the functions and spheres of action of the superior faculties is highly conducive to the formation of a bold, intrepid, and lofty moral character.

In discussing this subject with a friend in Scotland, who is now a well informed phrenologist, he favoured me with the following remarks:—

“I am able,” said he, “to recollect occasions in my boyhood, when my own instinctive faculties rebelled against certain political maxims, practices in trade, and religious opinions, which I heard inculcated or defended by persons to whom I looked up with respect, as wiser and more virtuous than myself. Inward emotions, nevertheless, condemned them, and I ascribed this state of mind to self-conceit, to imperfect knowledge, or want of experience, and tried to bend my judgment to their standards. I have lived,” he continued, “to be convinced that the emotion of the child, in several of these instances, evolved the sounder morality; and as a man I have

defended, with deliberate conviction, the positions which first dawned on my mind as instinctive impressions in childhood. But at that age, and long after, I suspected them to be wrong, because they were at variance with general opinion, and I had no standard by which to measure them and the current maxims of the world. In other instances," added he, "I have discovered that my first emotions were egregiously wrong. I may mention one, as an illustration. My first impressions in regard to the treatment of criminals were all severe, and even sanguinary. It appeared to me that the most effectual method of stopping highway robbery would be for every traveller to carry pistols, and blow out the brains of the robber, instead of giving him his purse. As a boy, I resolved to follow this practice when I became a man. I rejoiced in criminal executions, read accounts of them with great interest, and had strong desires to go to see them; but when I did so, I always felt ashamed and repented. My school-companions used to debate, with varying talent, the propriety of executions, and of their going to witness them, and I was confounded by the conflicting feelings and arguments which I heard them express. I can now refer the severity of my own instincts to the combined powers of Destructiveness, Conscientiousness, and Firmness, acting in ignorance of the natural dispositions of criminals, and of the temptations to which they are exposed; while I can trace the cruel views of some, and the benignant and forgiving spirit which characterized others, of my companions, to peculiarities in their own organization, all acting, like mine, in blindness and ignorance. Nor were these merely youthful errors, which subsequent knowledge of the world was destined to correct. On the contrary, they were the germs and buds of the dispositions of the future men. Some of my school-fellows were speedily transferred to commands, as young officers, in the army or navy. In these situations they gave effect, so far as their limited power permitted, to the maxims which their instinctive impulses or their associations in life had previously evolved. Others entered the profession of the law, became eminent as political partisans, and continue, to this day, to display the character which dawned in the play-ground of the school." So far my friend.

I may be in error, but on reflecting in the scenes here described—and many of us may be able to recall similar experiences—I cannot escape from the conclusion that these youths would have been greatly assisted in their endeavours to reach true and humane principles of judgment and action, if they had been instructed in the existence, functions, and spheres of activity of their various faculties, and in the effect, on their

judgment and feelings, of their own peculiar combinations of them. I may add, that I have not traced this confounding of right and wrong in judgment, in my young relatives who have been trained in a knowledge of Phrenology. They have, like other children, yielded occasionally to the impulses of the inferior feelings; but they saw clearly, both that they were wrong, and wherein they were in fault; and I found that Phrenology afforded a science and language of analysis between them and me, which enabled us speedily to come to a clear understanding respecting the merits or demerits of any particular line of conduct which they had pursued. I believe that I address more than one member of this Society who has already used Phrenology in the way I am now recommending, in the instruction of the young, and who has seen the advantages which I have described, to result from it.

Again, in the instruction of youth, parents and teachers draw information from two great sources—the Bible and works of profane history; but how dissimilar are the maxims which flow from these two fountains into the minds of children! In the New Testament, the benignant spirit of Christianity beams forth in all the soft radiance and enlivening freshness of a lovely vernal morn, filling the young soul with truthfulness, beneficence, and joy. It raises it above the earth, and trains it to cherish a glorious affection for all that is pure, holy, and exalted. Reading profane history, on the other hand, is like looking through a long vista on which the dark tempest of human passion sheds flickering and deadly gleams of light, revealing at intervals every form of misery, ignorance, and crime. Here and there, in the long reach of vision, a glow of sunshine penetrates through the deep obscurity, and bodies forth a few breathing forms of lofty intelligence and stately virtue. They stand, majestic and serene, amidst the clouds and whirlwinds which rage around them; and, inspired with a wisdom greatly in advance of their age, they look forward, with solemn steadfastness and the bright prophetic eye of faith, to the dawn of happier days than those which they were permitted to see. Such were Socrates and Plato, Melancthon and Locke, and the noble reformers of every age. But few and far between do these visions of light and beauty appear in the pages of this world's history. In general, it records the victor's triumph, and the captive's anguish; fields torn up by the ploughshare of destruction, and hearths laid desolate; the widow's lamentation and the infant's shriek; the deadly havoc of pestilence and famine, causing that cup of misery to run over, which man's malignant ire had wanted power, but not the will, to fill to its very brim. How can the Christian virtues

be cultivated in the soul, by the contemplation of such scenes, exhibited on the great stage of the world since time began ! We observe also, that, for the most part, history is written in the very spirit in which the deeds which it records were done. The vivid imagination and the eloquent pen of genius catch their inspiration from the propensities ; and the ruthless conqueror stands before us, as a being of gigantic power, commanding our awe at least, often enlisting our sympathies, and serving as a strong excitement to the youthful mind to go and do likewise. Again, in the study of Greek and Roman literature, what motley groups of gods and goddesses, of monsters and of miscreants, are introduced to the youthful mind, emblazoned with the splendours of poetry, painting, and sculpture ! Their thoughts, words, and actions, as presented in the classic page, stand too often in contradiction to the doctrines and precepts of Christianity. I ask—how is the youthful mind to escape unscathed from the contamination of such ideas, administered to it during its most active period of assimilation and growth ? It does not escape unharmed. History shews that too generally Christianity has yielded, and that the maxims of the world have prevailed. In point of fact, at this moment, the minds even of the most civilized nations are animated much more by the selfish and barbarous spirit of history than by that of Christianity. The former comes forth into day, while the latter is seen too often retiring into the closet and the sanctuary. How few minds, even in this free country, have full confidence in the practical power of human virtue ! I hear around me conservative alarms expressed, by the good, the wise, and the patriotic, lest the founders of your government should too early have placed an unlimited reliance on man's moral nature, when they instituted universal suffrage. How many schemes of enlightened beneficence and practical improvement are checked in the bud, or shrivelled up into feeble and inefficient forms, chiefly from want of faith in their supporters, in the power of right to commend itself to the acceptance of the people ! And whence have arisen this paralysis of virtue, and this despondency in her cause ? From the deadly fountain of history unpurified by an analytic philosophy. Unconsciously to ourselves, we form the conviction that the future will resemble the past. The past is dark and desolate ; and those men, therefore, are regarded as visionary dreamers, who, notwithstanding all the tempests of the long and dreary night which history records, see the morning star of happiness arisen, and who still place an unshaken reliance on man's capacity for improvement.

How, then, may a generation be trained, which shall believe

in the adaptation of man's nature to the Christian morality : which shall read the history of the past without having its faith in human virtue blighted, its sensibilities to the true, the refined, and the holy, deadened, and its hope in the future blasted and cut off? With all deference to the judgment of this assembly, I answer,—By teaching to the young Phrenology. Give them an *early*, and it will be an *abiding* conviction, that certain faculties exist, and are the fountains of all human action. Lead them to trace the spheres of activity of these, and to distinguish between their uses and abuses. Open up to their perception the superior authority and governing power of the moral and religious sentiments, and render them familiar with the objects of intellect ; teach them that it is given to enable us to acquire knowledge of all that God has instituted which it behoves us to know, that we may apply our faculties aright ; finally, train them to the habit of tracing misery to departures from the proper uses of the faculties, and enjoyment to their uses ; and you may then present the pages of history to their consideration, not only without danger, but with direct advantage.

They will then read in them the records of the animal propensities struggling to reach happiness unguided by the moral sentiments ; labouring to establish empires founded on force, fraud, violence, and injustice ; but constantly failing in their schemes, and producing only wretchedness and disappointment. Youthful minds thus enlightened, will strip the conqueror of his halo of glory and see in him the propensities combined with mighty intellect, devastating the mansions of the peaceful and the good, and immolating hundreds of thousands of his fellow men to gratify his own selfishness and ambition. They could not love or admire such a being.

They will discover in the existence and functions of the moral sentiments, that man is really adapted to Christianity ; and that the dismal past is not the anticipated record of the future ; but that, by the steady cultivation of his various powers, and their direction according to the laws of the Creator, man may realize all that his warmest advocates anticipate in virtue, intelligence, and enjoyment.

Possessed of a firm conviction of the existence and power of man's moral nature, they will gird up their loins in virtue's cause, and advance with a steady and undaunted step in the grand career of social improvement, unmoved by opposition—undismayed by obstacles.

Perhaps some may imagine that I propose to supersede Christianity by Phrenology. This idea is altogether erroneous. Christianity, no longer propagated by miraculous influ-

ences, depends for success on the education of man's natural powers. How was it corrupted and debased during the dark ages, and how did it shine forth with fresh effulgence when the art of printing came to its assistance! How vastly have the discovery of the compass and modern improvements in navigation extended its empire! But even with all these advantages Christianity has not yet triumphed. The burden of the discourse of every pulpit, is the lamentable extent to which Christian practice falls short of Christian precept. Where, therefore, is the error in inferring from this universally admitted fact, that something is still wanting to render Christianity supreme in its sway over every mind? I am aware that many excellent persons expect this crowning influence to descend from above, without man's agency or interference. But I respectfully submit to their consideration, that this influence did not compensate for the want of the art of printing and navigation; it did not compensate for the want of natural science, for the Pilgrim Fathers or their descendants who were earnestly sincere in their Christian faith, burned harmless old women under the conviction that they were witches, an act which modern science has rendered all educated Christians unanimous in condemning as superstitious, cruel, and unchristian. Why, then, should it be supposed extravagant to maintain that the discovery of the true philosophy of mind, far from superseding Christianity, is destined to form another grand epoch (like that of the invention of the art of printing) in its onward course?

In this country many excellent men fear the power of the demagogue to mislead the people. I should like to see the most splendid orator who ever bent a people to his will, address an assemblage of men who had been instructed in Phrenology from their youth, who had been trained to analyze every thought, word, and action, quickly as it was uttered; before whose mental vision the boundaries of good and evil had been made to stand forth as clear and well defined as the rocks which first greeted the eyes of the Pilgrim Fathers when they reached this land of their hopes and fears. I should rejoice to witness the attempt of Demosthenes himself, to instigate such an assembly to deeds of outrage and injustice,—to persuade them that individual and national grandeur could be best achieved by triumphant propensities and virtues prostrate,—in short, that the remedy for all social evils was to plunder the rich, to degrade the refined and intelligent, and to enthrone confident ignorance and rude propensity in high places of authority and power. The orator would be committed to a lunatic asylum by a unanimous vote of the people, whose reason

he had thus insulted, and whose moral emotions he had outraged. It is true that no candidate for popular favour would venture even now to present such naked propositions of injustice to the people, but many daily offer to their acceptance injurious schemes thinly clothed with sophistry and gilded by passion.

In proportion to the power which you confer upon your people of sifting moral and political propositions and resolving them into their elements, will be their dexterity in stripping off the ornamental finery from the sophist's speech, and in resisting his appeals to their passions. Your institutions call on your people to act on questions of great moment, and often of much difficulty. They need an instrument of moral analysis, at once simple and comprehensive, to enable them to do so with intelligence and success. Such an instrument is Phrenology. If you wish, therefore, to deprive the demagogue of every possibility of success, teach your young generation a sound philosophy of mind ; you will find that it is also the handmaid of a pure and practical religion.

Phrenology teaches us emphatically that mere knowledge is not sufficient to ensure virtuous conduct. It lays open to us the propensities and sentiments, as the main-springs of human actions, and proclaims, in the clearest language, that it is only by *training them* that really virtuous dispositions can be cultivated. It enforces the great truth that training is highly important in realizing a Christian condition of mind. No means, therefore, that can assist the parent and teacher in training can be unimportant. The most talented and zealous teachers have asked me, "How can we accomplish the training of the faculties most effectually?" They say, "We are aware of its importance, and we desire to train, but we experience much difficulty in doing so." I recommend to them to study profoundly the functions of the primitive faculties, their spheres of action, and the objects that excite them. This study must be serious, and the results of it must be made part of the stock of the teacher's mind. We cannot use knowledge,—we cannot teach it, nor impress others with it deeply,—until our own minds be saturated with it to overflowing. I state this from experience. When in Edinburgh, I gave six lectures on General Anatomy and Physiology. I found it extremely difficult to produce a favourable effect on my audience; and I discovered the cause. Although I knew the subject, had seen the parts dissected and their structure demonstrated, and had read descriptions of them, yet this knowledge was all in the memory. It had not been wrought into the warp and the woof of my own thoughts. Phrenology *has* been

thus woven into the very texture of my mind, and hence the greater ease and power with which I am able to interest other minds in its truths. Let other teachers become as familiar with it, and they will wield it as a powerful instrument in practising their vocation. When they have so studied Phrenology, they will discover that one branch of it offers them great assistance in training, which, to the uninitiated, and the mere reader of phrenological books, actually appears ludicrous when first mentioned. I allude to the natural language of the faculties. The maxim is very ancient, "*Si vis me flere, dolendum est primum ipsi tibi;*" if you wish to excite to weep, begin by weeping yourself. If you wish to train any faculty in a child, exhibit the activity of it in your own countenance, tones of voice, gestures, and language, and you will rouse it into action in him. The formation of habits, by a repetition of action, is the aim of training. I go farther still. Teach the child to exhibit the natural language of the faculty, and the very act of doing so will call up the emotion. If you find a child cross and ill-humoured, and you induce him to utter some kind speech to one of his companions, expressive of benevolence, and to suit the action to the word, to smile and look benignant; and to use soft and tender tones, you will find that his crossness cannot co-exist with this effort, if successful. It arouses benevolence, and he becomes, for the moment, what he seems. If the action be often repeated, the emotion will become permanent. The phrenological explanation is simple. The natural language is to the faculties what sound is to the ear; it rouses them into action. The idea of teaching children to act the natural language of the faculties which we wish to cultivate, may appear, as I have said, ludicrous to many persons; but the Creator has given us a capacity for acting, a faculty which enables us to call up the natural expressions of emotions when we want them—it is Imitation; and why should this power, divine in itself, be applied only to buffoonery or mischief? Most parents repress the talent of imitation in children because it is often so misapplied as to create enemies. I propose to direct it to its legitimate uses.

This idea is not entirely theoretical. I have known several eminent and philosophical actors, and they have assured me that they become for the time being the character which they represent. The late Mrs Siddons was mentally Lady Macbeth from the moment when she stepped into her carriage, at her own door, till the curtain fell after her last scene, and she had resumed her private dress. She did not approve of any person intruding on her feelings and attention during the progress of the play, even between the acts.

One effect of the constant practice of players in calling up and exhibiting the natural language of the feelings, is to render some faculties habitually prone to action in themselves in private life. The great tragedian who may be said to wield a magician's power over the propensities and sentiments of his audience by means of natural language, suffers in his own mind many tragic feelings, from the trained activity of his organs. Many are irritable, in consequence of the trained action of Combativeness, Destructiveness, and Self-esteem, the stock elements of heroic and tragic characters. They are often melancholy and desponding, from the trained action of Cautiousness; which furnishes the perturbed and distracted countenance, the horror-stricken look, the shriek of despair, and sometimes the madness, that petrify us when represented on the stage. The higher sentiments and intellect of the actor may govern his deportment in public, so that his general acquaintances may not observe these effects; but the close spectator recognizes them, and the actor confesses and laments them to his bosom friend.

The converse effects may be seen in persons whose vocation calls on them to put forth habitually the natural language of the higher sentiments. Who does not recollect the benignity, the heavenly purity, and the soft and soothing tones of voice of the Rev. Dr Tuckerman, of this city. These radiant beams of Christian emotion, are the natural language of Benevolence, Veneration, and Hope; which he is constantly calling into play, in ministering, as a home missionary, to the poor, the wretched, and the depraved. Has any one observed a similar expression of Benevolence and radiant joy, in the countenance of Dr Woodward, the Superintendent of the Worcester Hospital for the Insane? It is the natural language of those sentiments of tender sympathy and cheering hope, which he is habitually pouring into minds diseased, and which are the best antidotes to their afflictions. Another example may be mentioned. The Rev. Mr Gallaudet, of Hartford, was for many years Head-Instructor of the Deaf and Dumb, in the Institution near that city. He informed me, that however much annoyed in his own temper, however peevish, and even irritable he might be, the moment he began to instruct his pupils by the natural language of the higher sentiments, which was the only medium whereby he could cultivate these feelings in them, his evil genius fled, and the spirit of peace and goodwill reappeared in his bosom. He added that he had often subdued the worst passions in his deaf and dumb pupils solely by radiating on them the natural language of Benevolence expressed in compassion or regret. He has stifled rage also,

and brought forth the beauty of kindly affection, by insisting on the refractory pupil exhibiting the natural language of virtuous feeling. He is so impressed with the importance of natural language as a means of training the feelings, that he has strongly recommended it in his writings.

Again, Dr Woodward told me, when I visited the Worcester Hospital on 28th December 1839, that he finds the activity of the diseased faculties in his patients much increased by the presence or even the insignia of their objects. If a quarrelsome man find a feather and stick it in his hat, he instantly erects his head and becomes a soldier; and his diseased propensity rages more fiercely. Dr Woodward coaxes him to yield up the feather, and to lay aside his military air, saying to him, "We are all civilians here," and his pugnacity is mitigated. If a female patient who fancies herself a queen, get a shawl, or other means of making a robe, with a little finery and embroidery, she puts it on, and instantly struts and sidles about with majestic airs; and her disease is aggravated. He persuades her to part with it, as "we are all republicans here, and queens might not be properly respected," and the intensity of the diseased feeling gradually abates.

If any of the lower feelings be defective, the same means may be used to cultivate them. If a child be too timid, put a feather in his hat and make him a soldier, or place him in the attitude of Combativeness, and teach him to box with gloves, and this organ will become more active. If another be too humble and want self-reliance, make him march and strut with the air of Self-esteem and Firmness, and you will improve his confidence in himself.

One precaution, however, must be added, in recommending natural language as a means of training. Some children possess in a high degree the combination of faculties which constitutes the professional actor, the chief of which are Secretiveness and Imitation, and *they* have a natural talent for acting. They will, therefore, favour you with the natural language of the various organs which they enjoy adequately developed, and be essentially acting all the time. If one of them have strong propensities and be deficient in Conscientiousness, he may "smile and smile and be a villain." He *may* deceive you; but if he *be* a villain, he was one before the training which I recommend was administered, and, in my opinion, that training will do more to render him sincere, by giving his higher powers the ascendancy, than could be accomplished by any other method.

The lapse of time, however, admonishes me to bring these remarks to a close. I fear that to some portions of my audience

they may have appeared visionary and enthusiastic ; but I respectfully remind them once more, that I have spoken as a phrenologist to phrenologists, who no longer doubt the foundations of the science, but look forward with ardour to its beneficial applications. It is now within a few days of thirty-eight years since Dr Gall, the immortal discoverer of the functions of the brain, stood alone in the world as the author, the teacher, and the champion, of the new philosophy. It gave displeasure to the Emperor of Germany, and the Church of Austria ; and an edict was issued by the Emperor, the effect of which was intended to be the suppression of the doctrine, and all its consequences. On the 9th of January 1802, Dr Gall presented a respectful petition and remonstrance to the Government of his native country, shewing forth the truth and the beneficial applications of his discovery, and praying to be permitted to continue to teach it in public lectures. His petition contains these memorable words : "As my doctrine on the functions of the brain has been taught to several thousand hearers, and as it has been spread abroad among a still greater number of persons by the sale of Forriep's Treatise, in three editions, and by means of smaller extracts and notices, in almost all the German, English, and French journals, it is no longer in the power either of myself or of any human being to arrest its progress, or to set bounds to its circulation." The Emperor was inexorable ; the edict was enforced ; Dr Gall, in the forty-fifth year of his age, and in possession of a high and lucrative practice as a physician in Vienna, went into voluntary banishment, rather than remain silent—and who is now victorious ? The Emperor sleeps in the tomb, and so does Dr Gall ; but every word of these prophetic lines is already realized. Look at Phrenology in France, in Britain, and in the United States of America. It already directs lunatic asylums, it presides over education, it mitigates the severity of the criminal law, it assuages religious animosity, it guides the historian, is a beacon-light to the physiologist, and already has incorporated its nomenclature with the language of these countries. Who now reigns over the minds of the free, of the great in intellect, and of the good ? Is it the Emperor or the spirit of Dr Gall ? Thus it is ever. Francis of Germany, stripped of his diadem, is an uninteresting individual of the human race. His edict suppressed Phrenology in his own dominions ; and to this hour they lie buried in the darkness of ignorance, and ghostly superstition ; while light and beneficence beam on the nations around, from the luminary which he in vain endeavoured to extinguish. Dr Gall stands forth, the equal of Copernicus, Galileo, Harvey, and



Newton ; or, if discoveries are to be estimated by their consequences, he will one day be awarded a place in the temple of Fame, more elevated than the niches assigned even to these illustrious men !

Napoleon frowned on Dr Gall and his discoveries. But where are now Napoleon and his empire ? His body moulders in a solitary tomb, far from the scenes of his energetic deeds, and his empire has crumbled into dust. Has *he* triumphed over Dr Gall ? No : the cast of his own head now serves as one of the strongest evidences in support of Dr Gall's discovery ; and Napoleon, *dead*, ministers to Gall's enduring glory !

There can be but one Dr Gall, because there is no other department of nature equally important for man to know, with that which contains the philosophy of his own mind ; and this once discovered, no equal field remains to be explored by succeeding philosophers.

Next to Gall, beyond all question, stands Dr Spurzheim, on the anniversary of whose birth we are now assembled. He has not the merit of having discovered the functions of the brain ; but he has extended the knowledge of them by discovering important organs which Dr Gall did not reach, and he has taught more largely the applications of the whole. Animated by a generous devotion to truth, he, in early youth, cast aside the allurements of ambition, and the prospects of fortune, and dedicated his life to Phrenology, when it had no defender except its founder, and counted among its opponents the greatest minds of the scientific world. But signal has been his triumph ! In Britain, we cherish his memory with the deepest reverence and the fondest affection. He it was who first came, like a messenger from heaven, to make known to us the new philosophy ; and we find his monument in the good, the imperishable good, which he has done to us. We point, as you do, to improved hospitals for the insane, managed (to the admiration of our countrymen) by his avowed disciples, and on the principles which he taught ; to our improved schools, conducted on his maxims ; to our more just and humane administration of criminal law, particularly in cases of homicidal insanity ; to our enlightened, philanthropic, and philosophical press (for the journals of largest circulation and most extensive influence, in my native country, are conducted by followers of Dr Spurzheim) ; to our general advance in civilization : and we say we owe these great benefits to the new philosophy which Dr Spurzheim taught us to understand and apply.

On the 25th of January 1828, in my native city, and in the

presence of this illustrious teacher, I publicly acknowledged that "I owe every thing I possess in this science to him: his lectures first fixed my wandering conceptions, and directed them to the true study of man; his personal kindness first encouraged me to prosecute the study thus opened up; and his uninterrupted friendship has been continued with me since, communicating every new idea that occurred, and helping me in difficulties which embarrassed my progress." I now stand within a short distance from his grave, and nearly twelve years have rolled over my head since these words were spoken. I repeat them here with redoubled earnestness, and confirm the testimony then given to the value of the gifts in the following words: "I speak literally, and in sincerity, when I say, that were I at this moment offered the wealth of India, on condition of Phrenology being blotted from my mind for ever, I should scorn the gift; nay, were every thing I possessed in the world placed in one hand, and Phrenology in the other, and orders issued for me to choose one,—Phrenology, without a moment's hesitation, would be preferred."

On the 13th of December 1832, the intelligence of Dr Spurzheim's death in this city was communicated to the Phrenological Society of Edinburgh. Mr James Simpson, in alluding to the melancholy event, said: "His labours were as expansive as they were indefatigable; no scope was too great for them. He had gone to add the new world to the old, in one wide empire of truth. Alas! that America's first tribute to her illustrious guest should be a grave, and a monument!" That monument, citizens of Boston, is a noble tribute of respect to a great and good man's worth. The place, the form, the simple inscription of the name, "SPURZHEIM," all speak with a touching eloquence to the soul, which no pomp of architectural decoration, and no panegyric of classic phraseology, could have reached. Posterity will associate one name with that monument,—the name of Mr William Sturgis, citizen of Boston. This day I repaired to his residence, and tendered him my humble gratitude for the tribute which, in erecting it, he had paid to the memory of the benefactor of his race, to my master and my friend; and for which many a good mind will hereafter honour him.

I cannot take leave of this Society,—my last leave of them,—at which every emotion of my mind swells with sorrow, when I recall their virtues and intelligence, their ardent and expansive philanthropy, and their overflowing kindness to myself as a stranger—I cannot bid them farewell in more appropriate terms than by recommending to them to carry into effect the resolution that was adopted on the 14th of November 1832, by the Boston Medical Association. It is in these words:—



“Resolved, That we recommend to our fellow citizens the opinions of the deceased, on the improvement of our systems of education, and especially what relates to the development of the physical powers and moral dispositions; and, as they can no more expect to hear them from the lips of our lamented friend, that they lose no time in making a practical application of them to the existing state of our institutions for the culture of the human mind.”

II. *The Right and Moral Relations of Property.* A Lecture delivered before the Mechanics' Institute of New York. By E. P. HURLBUT, Esq. (Concluded from page 113.)

My limits will not allow me to discuss the subjects of the right of property generally. I propose only to consider very briefly the ownership of land in regard to what is denominated *eminent domain*; and on a future occasion to examine that species of property which may be termed intellectual, arising from mechanical invention, and literary and scientific labour.

The earth being the habitation of man, and adapted by the Creator to the supply of his wants, may be said to be dedicated to his use, and is to be possessed and improved by him in such proportions and in such manner as his particular organization and external circumstances shall point out.

We have considered the origin of the simplest idea of exclusive property, and shewn that it emanates from an innate propensity to possess, associated with a selfish sentiment. We have seen how the intellect enlightens these “blind guides,” and teaches man the utility of property; and we have brought in the sentiments to hallow the right, and to be administered unto by the blessings of wealth. We are prepared, therefore, to discuss the right of property in land, in connection with civilized men—such as came to this country and took possession of a savage wilderness, inhabited only by beasts, and a few scattered aboriginal tribes of men, most of whom could not be deemed to possess the soil, or any considerable portion of it, more than the quadrupeds upon whose flesh they relied for subsistence. We thus place upon unoccupied soil a number of men, whose instincts and sentiments, under the guidance of the cultivated intellect, seek their natural gratification. We have not to speculate upon what these men would have done in what is called “a state of nature.” An innate propensity

and sentiment are always in a state of nature. Both are naturally blind feelings, as well in civilized as in savage man. How they shall be gratified or restrained depends upon the intellectual faculties, and the high cultivation of these faculties produces civilization ; so that there is no difference between civilized and savage man, in reference to the innate desire of exclusive property ; and hence no difference exists between them as to the abstract right of property. The cultivated intellect or civilization does not, therefore, create or suggest the right of property, but only increases man's power to acquire and defend it, and enhances the enjoyment of its possession.

Suppose, then, any number, say one hundred, of civilized men, not owing allegiance to any government, to have come to these shores, and to have settled upon vacant and uncultivated lands—what would have been done ? The western world is all before them—but each one would appropriate to himself a portion of land sufficient for his purpose. Their separate possessions would now appear to be marked and defined, and as each selected and bounded his intended farm, the majority would acquiesce in his claim. If differences arose, the enlightened justice of the community would settle the right. Presently agriculture would flourish—the arts would be cultivated to some extent among them—and the right of each man to his well-defined landed estate would be admitted, established. Laws emanating from the sentiments of this community would be ordained for the government of the social body. Here, then, would be a State, to which each individual would stand in the relation of an equal member of it. No sovereign king has granted their lands to them, with an implied reservation enabling him to demand them again for his own or the public use. Their patent is derived from the Sovereign of the Universe, without condition or reservation—except that the thing granted should subserve the high interests of humanity.

Now, suppose this community, urged by some great public necessity, should require the lands of any one individual to be relinquished by him, in order that they might be appropriated to the public use—what doth natural equity adjudge ? Why, this clearly ; that the owner ought to contribute only his equal proportion toward answering the public wants ; and as this community is composed of one hundred persons—whom we will suppose to have equal estates—his contribution ought to be one-hundreth part of the whole. But instead of this, the community require him to render up the whole of his lands to the use of the public, since their necessity demands it. Then they must compensate and indemnify him for ninety-nine hun-

dredths of the value of the estate to be taken from him ; by which all will contribute equally to the public wants.

But can they compel him to relinquish his whole land to answer a public necessity, even upon awarding to him a full indemnity ? Can they thus outrage his sense of property ? May he not resist it ?

He would resist it even unto death, if he were endowed only with the instinct of Acquisitiveness, and Self-esteem, with full defensive impulses. But such a being would not be human.

Our man is a rational moral being. He loves and cherishes human society. He is just—and would do unto others, whether collectively or individually, as he would desire them to do unto him. He is benevolent, and desires the happiness of his brethren. He will as cheerfully relieve a public as a private necessity. He loves not mankind collectively less than man individually—and his selfish feelings are overborne by his superior sentiments. He is prompted to make a surrender of his local attachments, and personal convenience, upon the altar of the public good. And while, on the one hand, his very nature impels him to this act, the community, on the other, are impelled by their sense of justice, to compensate and indemnify him for the property of which their necessity deprives him. Hence a great public necessity can be relieved without offence to private right, if only a proper public necessity require the surrender, and enlightened public justice award the compensation. But let it ever be remembered it is the community—the State only—that can claim to divest a private citizen of his property, and that only in cases when the general safety or happiness is to be greatly subserved ; for, as between individuals, each man is naturally inclined to resist every encroachment upon his private possessions, and even the State cannot present a case which will prompt the emotions which impel to a surrender of private property, except it make the general safety or happiness the exciting cause. And still the measure of public justice must be full. Private property is sacred to the owner for the preservation of his life and the gratification of his sentiments. He hath a safety and necessity to provide for as well as the community. The State hath the means of providing for the safety and the happiness of its members ; and when it divests an individual of the means embraced to answer the demands of his nature, it must restore him, as far as lies in its power, by an adequate substitute, in order that the safety and happiness of all may be duly cared for and protected.

This doctrine is thus laid down by Sir William Blackstone :

"So great is the regard of the law for private property, that it will not authorize the least violation of it—no, not even for the general good of the whole community. If a new road, for instance, were to be laid through the grounds of a private person, it might, perhaps, be extensively beneficial to the public; but the law permits no man or set of men to do this without the consent of the owner of the land. In vain may it be urged that the good of an individual ought to yield to the community; for it would be dangerous to allow any private man, or even any public tribunal, to be the judge of this common good, and to decide whether it be expedient or no. Besides, the public good is in nothing more essentially interested, than in the protection of every individual's private rights, as modelled by the municipal law. In this and similar cases, the Legislature alone can, and, indeed, frequently does, interfere, and compel the individual to acquiesce. But how does it interfere and compel? not by absolutely stripping the subject of his property in an arbitrary manner, but by giving him a full indemnification and equivalent for the injury thereby sustained. The public is now considered as an individual treating with an individual for an exchange. All that the Legislature does is to oblige the owner to alienate his possessions for a reasonable price; and even this is an exertion of power which the Legislature indulges with caution, and which nothing but the Legislature can perform."*

Chancellor Kent says—"It must undoubtedly rest as a general rule in the wisdom of the Legislature to determine when public uses require the assumption of private property; but if they should take it for a purpose not of a public nature, as if the Legislature should take the property of A. and give it to B., or if they should vacate a grant of property, or of a franchise, under the pretext of some public use or service, such cases would be gross abuses of their discretion, and fraudulent attacks on private rights, and the law would clearly be unconstitutional and void."†

The Legislature, then, cannot take the private property of one man and give it to another, even upon an award of full compensation. A law doing this would be utterly void, as offensive to natural reason and justice. If this cannot be done in the whole, it cannot be done in part—since all offence of this sort is to be avoided. It is worth while, then, to consider the character of those laws which authorize incorporated companies to deprive private owners of their property, for the

* Blackstone's Com., vol. i., page 140.

† Kent's Com., vol. ii., page 339.



purpose of constructing works of internal improvement. Do not these laws unwarrantably infringe upon private right? In general these companies execute works of public *convenience* only; the State always constructs her works of public *necessity*, such as fortresses, post-roads, &c., in the exercise of the sovereign power. My first objection lies to the *case itself*, of taking the private property of a citizen by a corporate body. Mere public convenience is not enough—it is not so high and sacred as the right invaded. It cannot move a private owner to the sacrifice of his right. Take a railroad, for instance; it may address the organs of Time and Destructiveness, but no man's Benevolence is so wounded at seeing people move at only a horse's speed as that he will surrender his garden and his lawn, his groves and sweet fields, to lay the track of whizzing engines, in order that his brother may get on faster. In such a case, if he will not volunteer in favour of a private company, the law ought not to compel him to part with his estate. The case does not command him. There is nothing great or pressing in the matter. A man may ride fast and be no better, and slow and be no worse. In this case the owners ought to be left free to grant or withhold their property at their option. This might, in a few cases, retard public improvements, but it would advance *public justice*, which is of far greater importance.

It may be oftentimes difficult to distinguish between works of public necessity and convenience; but the strict rule is safest when there is danger of infringement upon private right. A just government will protect the rights of the meanest citizen from invasion; and especially will it not authorize violence to his rights; and when the case is doubtful, it ought to abstain altogether. It is a fearful thing to behold the energies of a sovereign State lent to a corporation, to assist it to wrest from a private citizen his property—to see his unequal struggle—to see him fall at length beneath the very power that ought to protect him—and then to see him rise only to loath and curse that power, which, if well directed, he would have revered and blessed.

The safety of private right, in this respect, lies in narrowing the construction of public necessity, and confining the right of *eminent domain* to cases of great urgency, when the safety or happiness of the community imperiously demands the surrender of private property. In such cases the public demands will be cheerfully acquiesced in by every good citizen. In these instances, when a good man would spontaneously yield his right, an indifferent one can be *compelled* to make the surrender.

Now if the State in its sovereign capacity constructed all works for the public benefit, it seems to me that this rule would in general be observed. It is the true function of sovereignty to answer the demands of the public necessity, and to act for the general happiness. The citizen reverences the government, and is disposed to acquiesce in its reasonable assertion of power. When the State acts directly upon the case, the ministers of the law only interfere with his private interest, and they are clothed with an authority which he feels bound to respect. If the State decline to construct any particular public work, it is evidence to him that this is not one of great public necessity; since, if it were, it is the duty of the State to construct it, and he will not allow himself to presume a neglect of duty on the part of the government. But the State clothes a few sharp-sighted corporators with the power to enter upon this very work, who claim to be warranted by law to do an act of State sovereignty, and they assert against a private citizen the right to deprive him of his private property against his will, which is the highest exercise of the sovereign power. This is an offence to the citizen; his property is wrested from him by force, and transferred not to the State, but to private persons, who make profits out of its use. Perhaps the public at large may be as well accommodated in some cases as if the State had done the work; but the difference mainly lies in compelling a citizen to part with his property for the benefit of other private persons, in a mere matter of business and money-making so far as they are concerned. This is literally taking the property of one man and giving it to another—the case which the jurists condemn. Nothing of this kind is done when the State takes his property; it passes to the government; and if profits accrue from the work, they go into the public treasury to be expended for the benefit of the whole community. But when corporations take his property, all the profits are enjoyed by private persons; and he is divested of his estate in a case where, in the primitive state I have supposed, he would not have made the surrender of his own accord.

It may be answered that he is paid for his property. I grant it; but then it is *compelling* one man to *sell* to another. Now, among those who buy and sell, a homely saying obtains, "that it takes *two* to make a bargain," and both are volunteers. The State in no other case condescends to preside over the contracting parties, and to compel one to yield to the demands of the other. This is a curious exercise of the sovereign power. Two minds must volunteer and agree between citizens before a right can be either surrendered or acquired.

The State cannot compel *as between them*, but only between *itself* and them; and in this latter case it must take the thing to itself, by its public officers, and use it for the common benefit. If it delegates its sovereignty in this particular, its dignity is lost, its power is not respected, and the sovereign power stands degraded to the position of a common citizen, ministering to speculation and avarice, and exciting hatred and contention and strife among the people. I maintain, then, that the power residing in the State to construct works of internal improvement cannot be delegated to private persons or corporations without high offence against private right. My own observation confirms me in the correctness of this proposition. The Erie canal, and the Utica and Schenectady railroad, the former a State work and the latter the work of a corporation, are constructed in the same valley and run parallel to each other for some 80 miles or more. The owners of property required for the construction of these works, respectively, took very different positions in regard to them. The most enlightened and best citizens acquiesced, with very little reluctance, in the construction of the State work, and it was the most ignorant and selfish of the landholders who opposed it; while in the case of the railroad, the work of a corporation, the most intelligent and best-disposed landholders zealously opposed the work, while the ignorant acquiesced most readily in its construction.

A State work is always under the control of the people, while that of corporations is in the hands of private persons, and may be perverted to their selfish purposes. Interests adverse to the public may control, and the general benefit may be lost sight of. It seems neither necessary nor expedient for the State to delegate a power which it can well retain and exercise.

But I regret to say that the reverse of all this is the established doctrine of this State, and of most of the States of the Union. And so far to the reverse is this doctrine carried, that the Supreme Court of Tennessee have solemnly adjudged a law to be constitutional which authorized a company to take the lands of a private person, for the purpose of erecting a common grist mill thereon, at which all the inhabitants of the neighbourhood should be entitled to have their *grinding done in turn*, and at fixed rates, although the whole property and profits of the mill were to belong to the proprietors thereof, who, by force of this law, wrested the property from its owner! A high judicial officer of this State has hunted up this case and approved it as authority. He says,—“It is true in that case each individual could not go to the mill and grind his

Now if the State in its sovereign capacity constructed all works for the public benefit, it seems to me that this rule would in general be observed. It is the true function of sovereignty to answer the demands of the public necessity, and to act for the general happiness. The citizen reverences the government, and is disposed to acquiesce in its reasonable assertion of power. When the State acts directly upon the case, the ministers of the law only interfere with his private interest, and they are clothed with an authority which he feels bound to respect. If the State decline to construct any particular public work, it is evidence to him that this is not one of great public necessity; since, if it were, it is the duty of the State to construct it, and he will not allow himself to presume a neglect of duty on the part of the government. But the State clothes a few sharp-sighted corporators with the power to enter upon this very work, who claim to be warranted by law to do an act of State sovereignty, and they assert against a private citizen the right to deprive him of his private property against his will, which is the highest exercise of the sovereign power. This is an offence to the citizen; his property is wrested from him by force, and transferred not to the State, but to private persons, who make profits out of its use. Perhaps the public at large may be as well accommodated in some cases as if the State had done the work; but the difference mainly lies in compelling a citizen to part with his property for the benefit of other private persons, in a mere matter of business and money-making so far as they are concerned. This is literally taking the property of one man and giving it to another—the case which the jurists condemn. Nothing of this kind is done when the State takes his property; it passes to the government; and if profits accrue from the work, they go into the public treasury to be expended for the benefit of the whole community. But when corporations take his property, all the profits are enjoyed by private persons; and he is divested of his estate in a case where, in the primitive state I have supposed, he would not have made the surrender of his own accord.

It may be answered that he is paid for his property. I grant it; but then it is *compelling* one man to *sell* to another. Now, among those who buy and sell, a homely saying obtains, "that it takes *two* to make a bargain," and both are volunteers. The State in no other case condescends to preside over the contracting parties, and to compel one to yield to the demands of the other. This is a curious exercise of the sovereign power. Two minds must volunteer and agree between citizens before a right can be either surrendered or acquired.

The State cannot compel *as between them*, but only between *itself* and them ; and in this latter case it must take the thing to itself, by its public officers, and use it for the common benefit. If it delegates its sovereignty in this particular, its dignity is lost, its power is not respected, and the sovereign power stands degraded to the position of a common citizen, ministering to speculation and avarice, and exciting hatred and contention and strife among the people. I maintain, then, that the power residing in the State to construct works of internal improvement cannot be delegated to private persons or corporations without high offence against private right. My own observation confirms me in the correctness of this proposition. The Erie canal, and the Utica and Schenectady railroad, the former a State work and the latter the work of a corporation, are constructed in the same valley and run parallel to each other for some 80 miles or more. The owners of property required for the construction of these works, respectively, took very different positions in regard to them. The most enlightened and best citizens acquiesced, with very little reluctance, in the construction of the State work, and it was the most ignorant and selfish of the landholders who opposed it ; while in the case of the railroad, the work of a corporation, the most intelligent and best-disposed landholders zealously opposed the work, while the ignorant acquiesced most readily in its construction.

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own grist, but still it was the *public utility* of having such a mill, where each individual had an equal right to be served, which *authorized the taking of private property* for such purpose, upon payment of a full compensation for the same." This is grinding out law with a vengeance! He lays great stress upon the circumstance of each man having a grist being *served in turn*, as the point of *public utility* to be subserved by this sacrifice of private right. It seems to me that no one but an individual who, instead of being at school, had been used to convey grists to be ground, and who had been greatly oppressed and nearly heart-broken by not being "*served in turn*," could have appreciated so highly this species of "*public utility*."

III. *Skulls of the Extinct Race of Peruvians—Artificial Distortion of the Head.*

At the meeting of the British Association held at Plymouth last summer, a paper by Mr P. F. Bellamy, descriptive of two Peruvian mummies presented by Capt. Blanckley of the Royal Navy to the Devon and Cornwall Natural History Society, was read before the Zoological Section. These mummies (as we learn from the report of the communication in the *Athenæum*) "proved to be the remains of children of different ages, one a few months old, the other not much more than one year; they were brought from the mountainous district of Peru, but at a considerable distance from the lake Titicaca. In conjunction with them were found certain envelopes (one of which proved to be an article of dress), and the model of a raft or catamaran, two small bags containing ears of an undescribed variety of Indian corn, and two small earthen pots. He also exhibited a variety of other models found wrapped up with others examined by Capt. Blanckley. The skulls were found to resemble those adult specimens contained in the Museum of the Royal College of Surgeons in London, and presented the same peculiarities, viz. a short projecting face, square protruding chin, receding forehead, and elongated cranium. He stated, that he considered their formation to be natural, for the following reasons: 1st, that the peculiarities are as great in the child as in the adult, and, indeed, more remarkable in the younger individual than in the elder; 2d, from the great relative length of the large bones of the skull, all of which are elongated

in a posterior direction ; 3*d*, from the position of the occipital bone, which occupies a place in the under part of the cranium ; 4*th*, from the absence of marks of pressure, there being no elevation of the vertex nor projection on either side ; and, 5*th*, from there being no instrument, nor mechanical contrivance, suited for the process of compression, found with the remains. He called attention to the peculiar formation of the occipital bone, which consisted of five rudimentary portions ; the fifth piece being placed between the occipital portion, commonly so called, and the two parietal bones. He considered the probability of the mummies being the remains of some of the true Titicacan race, deposited after the arrival of the original emigrants who founded the Incas dynasty, and called on ethnologists to say what Asiatic people they resembled in manners, customs, and attainments ; but if no affinity could be found, he considered it fair to attribute to the indigenes a mental capacity equal to the originating of such inventions, as the specimens connected with these mummies would indicate them to have been capable of. The extinction of the race he considered to have been gradual, and occasioned by an intermixture of blood with the followers of Manco Capac. Lastly, he suggested that the adult skulls called Titicacans were of two kinds, one being of the pure stock, the other of a spurious character, resulting from the union of the indigenes with the settlers of Asiatic origin, and which present a modified form, there being added to the receding forehead and elongated cranium, an elevated vertex and flattened occiput, formed principally by an altered position of the occipital bone, which, instead of lying on a plane with the horizon, rises in a sloping direction upwards and backwards.

“ Prof. Owen said he had carefully examined these skulls, and also those from Titicaca in the College of Surgeons’ Museum. If they were of a natural form, they were the most remarkable in the world. They were not ordinary flattened heads ; he believed, however, that it was artificially produced, and that it arose from pressure being applied all round the skull. Prof. Owen then pointed out a concavity existing all round the head, passing over the frontal, parietal, and occipital bones. Pressure in the direction of this groove would, he believed, produce this shaped head. It was satisfactory to have these young skulls, as the modification of the process of ossification could be more evidently seen than in the older skulls. —Dr Richardson observed, that the different tribes of Americans had different modes of compressing their heads. He now possessed the head of an American chief, a man of great talent, and it was of the same shape as those on the table.

Mr Ball had just discovered a band amongst the materials on the table, which appeared to be used for compressing the head. On applying it over the head of the eldest child it seemed to fit tolerably well. It was, however, a little too large.—Dr Caldwell, of America, stated, that these were the most remarkable Indian heads he had ever seen. The projection of the upper jaw in these heads was most remarkable.—Prof. Owen observed, that in the head of the Guiana Indians, the upper jaw projected in the same manner.”*

In the year 1832, two old Peruvian skulls were dug up at Arica by Mr James Steel, surgeon of H. M. S. Volage, who presented them to the Phrenological Society of Edinburgh (National Skulls, Nos. 174 and 175), and, in answer to enquiries by Mr Combe, communicated the following particulars respecting them :—

“ I am sorry to say that the information I have to give on the subject of the two Peruvian heads, is not only scanty, but probably little to be depended on—being derived from the peasantry of the country, who are not the most enlightened people in the world. The ground from which the bodies were dug, is situated about a mile and a half to the southward of the port of Arica, on the face of a sandy slope, about 100 yards from the margin of the sea. After clearing away the sand from the surface, the whole face of the hill or slope is found to be covered with a layer or crust of saltpetre varying in thickness from 6 to 10 inches : beneath this the bodies were found at a depth of from 1 to 4 or 5 feet. The bodies were always in a sitting posture, with the head touching the knees, and the hands folded over the breast. They were completely wrapped up in their cloak or poncho, which was generally very fresh, or at least little decayed. Near the head was found usually a sheaf of arrows, and around them, matté bags, small earthen pots, small models of canoes, &c. &c., to be used, I fancy, in their new hunting grounds. The tradition among the peasantry of the country is, that this was the burying-place of the chiefs of the ancient inhabitants ; upon the death of one of whom a certain number of slaves were buried along with him alive. As to the probable truth or falsehood of this tradition I cannot pretend to speak ; but it is a curious fact that sometimes three bodies (of a man, a woman, and child)—or two bodies (of a man and woman)—are found lying in the same grave, as if whole families had been interred together. A great part of the ground has been cut up for the purpose of disinterring the bodies or finding curiosities, and the whole is

strewn with bones, bleached to whiteness. The present possessors of the country are extremely careless about the matter. Had the bodies been those of Spaniards, it is probable the graves would not have been allowed to be disturbed. I shewed a peculiarly white skull to a lad who assisted us in disinterring the bodies, and threw it down on the ground. He laughed, and kicked it down the hill, saying, "No es Christiano."

"I am almost ashamed to offer you so imperfect an account, but I had little opportunity to make enquiry, and the vague stories one hears are seldom to be depended on. As to the character of the people, I can say nothing more than is to be found in the accounts of the first settlement of the country by the Spaniards. The bodies have probably lain in the ground 300 years or upwards."

In a volume published at London in 1835, entitled, "Three years in the Pacific, 1831-4; by an Officer in the United States' Navy," the burial-place mentioned by Mr Steel is described thus:—

"On the side of the hill are found the graves of this injured people, indicated by hillocks of upturned sand, and the numbers of human bones bleaching in the sun, and portions of bodies, as legs and arms, or a hand or foot, with the dry flesh still adhering, scattered over the surface. The graves have been a great deal dug, and many bodies carried to Europe by travellers."

"The surface is covered over with sand an inch or two deep, which being removed, discovers a stratum of salt, three or four inches in thickness, that spreads all over the hill. Immediately beneath are found the bodies, in graves or holes not more than three feet in depth.

"The body was placed in a squatting posture, with the knees drawn up, and the hands applied to the sides of the head. The whole was enveloped in a coarse but close fabric, with stripes of red, which has withstood wonderfully the destroying effects of ages; for these interments were made before the conquest, though at what period is not known. A native gentleman told me that drinking-vessels, and the implements of the occupation pursued by the deceased while living, as balsas, paint-brushes, &c., were frequently found in these graves.

"Several of the bodies which we exhumed were in a perfect state of preservation. We found the brain dwindled to a crumbling mass, about the size of a hen's egg—perhaps adipocere? The cavity of the chest was nearly empty, and the heart contained what seemed to be indurated blood, which cut

with as much facility as rich cheese. It was reddish black. The muscles cut like hard smoked beef.”*

One of the skulls presented to the Phrenological Society by Mr Steel (of which three views are here given, figs. 1, 2, and 3), possesses what we understand to be the form of those exhi-

Fig. 1.

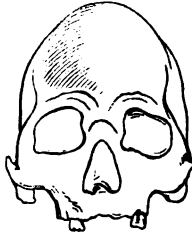


Fig. 2.



Fig. 3.

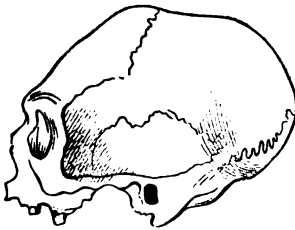
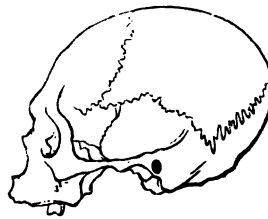


Fig. 4.



bited at Plymouth. It is perfectly symmetrical, but has an obvious groove below the occipital spine, and extending round the skull over the inferior-posterior and the superior-anterior angles of the parietal bones. The other skull (fig. 4), which is the smaller of the two, is less strangely shaped, but at the same time not quite so symmetrical, the left side of the upper portion of the frontal bone being more prominent than the right. Here also, though less distinctly, a groove is seen passing round the skull in the same direction as in the other. The following are the dimensions of both in inches, the first three measurements being taken with tape, and the remainder with callipers :—

* Vol. ii. pp. 241-3. The same collection of dead bodies is described by Frezier, a French voyager who visited Peru in 1712; and another collection was seen by Wafer near Vermijo, in 1687. See extracts from these travellers in Brand's *Journal of a Voyage to Peru* in 1827, p. 91. Lond. 1828, 8vo.

	No. 1.	No. 2.
Greatest circumference of skull, . . .	21 $\frac{1}{4}$	19 $\frac{1}{2}$
From Occipital Spine to Individuality, over the top of the skull, . . .	13 $\frac{1}{8}$	11 $\frac{1}{8}$
... Ear to Ear vertically over the top of the Skull, . . .	12	11 $\frac{1}{2}$
... Philoprogenitiveness to Individuality, . . .	8	7
... Concentrativeness to Comparison, . . .	6 $\frac{1}{4}$	5 $\frac{7}{8}$
... Ear to Philoprogenitiveness, . . .	5 $\frac{1}{4}$	4 $\frac{1}{2}$
... Individuality, . . .	4 $\frac{1}{2}$	4 $\frac{1}{8}$
... Benevolence, . . .	5 $\frac{1}{4}$	4 $\frac{7}{8}$
... Firmness, . . .	5 $\frac{1}{4}$	5
... Destructiveness to Destructiveness, . . .	5 $\frac{1}{8}$	5 $\frac{1}{8}$
... Secretiveness to Secretiveness, . . .	5 $\frac{1}{8}$	5 $\frac{1}{8}$
... Cautiousness to Cautiousness, . . .	5	4 $\frac{1}{2}$
... Ideality to Ideality, . . .	3 $\frac{1}{4}$	3 $\frac{1}{2}$
... Constructiveness to Constructiveness, . . .	4 $\frac{1}{8}$	3 $\frac{7}{8}$
... Mastoid process to Mastoid process, . . .	4 $\frac{1}{2}$	4 $\frac{1}{8}$

In 1827, several years before Mr Steel's visit to Arica, Mr J. R. Pentland had discovered in the province of Upper Peru, now called Bolivia, a number of skulls similar to that represented in figs. 1, 2, and 3. "I found them," says he, "in the ancient graves called Huacas, in the great alpine valley of Titicaca, which is likewise remarkable for being the country in which civilization, planted by the Peruvians, flourished to a degree unrivalled among the other tribes of the New World. These sepulchres have the form of high round towers, and in some places are constructed of enormous masses of masonry. The stones are very carefully and skilfully arranged in a manner similar to that observed in the old structures of Greece and Italy, named by our antiquarians Cyclopean. I have met them only in the great valley of Titicaca, which extends from the 17th to the 19th degree of latitude (south), and on the skirts of the Andes which form that valley. . . . I examined several hundreds of these sepulchres, and in all of them found human skeletons. . . . The skeletons belonged to persons of all ages, from the youngest child to the oldest man. All the heads, young and old, had the same form, from which I conceive that it may be with justice inferred that their peculiar shape was not artificially caused by pressure, as is the case with the Caribs and some other of the barbarous tribes in the New World. A careful examination of these skulls has convinced me that their peculiar shape cannot be owing to artificial pressure. The great elongation of the face, and the direction of the plane of the occipital bone, are not to be reconciled with this opinion, and therefore we must con-

clude that the peculiarity of shape depends on a natural conformation. If this view of the subject be correct, it follows that these skulls belonged to a race of mankind now extinct, and which differed from any now existing."* He states also, that "many sepulchres of the present race of Peruvian Indians occur along the coast of the Pacific Ocean, the skulls found in which agree in every respect with the form of that race, but in no instances do they possess the peculiar characters of those found in the interior." This we believe to be correct; but, as already seen from Mr Steel's letter, and as farther appears from the *Crania Americana* of Dr Morton, there are on the coast many sepulchres of the extinct as well as of the present race,—the ancient tombs containing skulls similar to those found in the valley of Titicaca.

The specimens referred to at Plymouth, as contained in the Museum of the Royal College of Surgeons in London, are, we understand, some of the skulls brought to Europe by Mr Pentland; others of these skulls which Tiedemann inspected in the Museum of Comparative Anatomy at the Jardin du Roi in Paris, are described by that anatomist as follows:—"These skulls are remarkable for their unusually great length, the axis from the forehead to the occiput being much longer than in any other skulls I have seen; while the lateral axis is proportionably shorter, in consequence of which they seem compressed at the sides. The face is exceedingly projecting, and the forehead very retreating, so that the facial angle of Camper is smaller than in any known race of man. The os frontis is continued far backwards towards the vertex, and is very long, narrow, and flat. The parietal bones look partly backwards, and where they join the frontal bone make a remarkable arch or protuberance. The occipital foramen is large, and its plane looks not downwards and forwards, but somewhat backwards. The zygomatic processes are not prominent."† This description is applicable to the larger of the skulls brought from Arica by Mr Steel, with the following exceptions:—*1st*, That in it there is no unusual projection of the face; *2dly*, That the frontal bone seems less flat; *3dly*, That the "remarkable arch or protuberance" is formed almost wholly by the frontal bone; *4thly*, That the occipital foramen is of ordinary size; and, *5thly*, That there is great prominence of the zygomatic processes. Tiedemann assents to the inference of Mr Pentland, that the continent of America was inhabited by aborigines who belonged

* Letter to Professor Tiedemann, in the second part of the 5th vol. of the *Leitschrift für Physiologie*; translated in the Dublin Journal of Medical and Chemical Science, vol. v., p. 475, July 1834.

† Dublin Journal, v. 475.

to a now extinct race of mankind differing from every other in the particulars above detailed.

In the same volume of the Dublin Journal, Professor Scouler, an eminent naturalist, who has himself witnessed and described* the process of artificially changing the form of the head among some of the tribes on the western coasts of North America, and who has brought to Europe specimens of skulls thus altered,—subjoins some valuable observations on the article just quoted. "The Peruvian cranium described by Tiedemann," says he, "possesses so very remarkable a configuration, that we would be tempted to adopt his opinion that it belonged to an original and primitive race, if we were certain that its form had not been produced by artificial means. If we remember that the practice of deforming the head by means of pressure has been very general throughout America, and the result has been the production of crania as anomalous as those of the ancient Peruvians, we will rather admit that in this instance also compression has been employed. This opinion," he adds, "is greatly strengthened by other circumstances. Blumenbach has figured a deformed and compressed Peruvian cranium from Quilca :† the form is different from that of the skull represented by Tiedemann, and from those of the Indians of North West America ; but different modes and degrees of compression will produce different kinds of deformity.‡ We have in our possession a skull in which the pressure has been applied diagonally from the left half of the frontal to the right half of the occipital bone. In addition to

* In the Zoological Journal, iv. 304. 1829.

† "Decades Craniorum, tab. lxx."

‡ The skull figured by Blumenbach appears to be that of an individual of the modern Peruvian race, and strikingly resembles nine skulls from the same locality in the collection of the Phrenological Society (National Skulls, Nos. 167-173, 224, and 225). One of these, represented by the annexed cut, was brought in 1826 by Lieut. C. R. Malden from Chilca, near Lima (the same place, we presume, as Quilca), where it was found in an ancient cemetery, placed in the middle of a circle of skeletons. It is described in the third volume of this Journal, p. 430, and again referred to, iv. 428. Six of the others were taken, along with eight having a similar form, from one of the Huacas in the neighbourhood of Lima, by a mercantile correspondent of Mr Watson of Glasgow, who presented them to the Society in March 1827 (see vol. iv. p. 426). The remaining two are casts presented in 1835 by Samuel Stutchbury, Esq. of Bristol, who stated that one of the originals was taken from an ancient tomb at Huaco, an Indian town north of Lima, and the other from the temple of the Sun at Pachacamac. In these skulls it is the occiput which has been compressed, and there is great irregularity of shape. Seven similar Peruvian skulls are figured in the *Crania Americana*, by Dr Morton, who also gives the result of the measurement of twenty-three adult skulls of this modern race.



these facts, we have the testimony of historians and travellers that it was the practice in Peru to compress the heads of the children. The following authorities, as quoted by Blumenbach, are sufficient to establish this point. De la Condamine informs us that the custom prevails in South America, and that it was known to the Peruvians; and in the year 1585 the synod of Lima prohibited the custom under the pain of ecclesiastical punishments. The synod alludes to the practice as universally prevalent in Peru, and that it has fallen into disuse since the arrival of the Spaniards in that country.* These and other facts mentioned by Dr Scouler are, he says, "sufficient to prove the possibility of modifying the human cranium by means of pressure, that the custom was very general throughout North and South America, and that the practice prevailed among the ancient Peruvians; consequently," he adds, "it is more probable that the ancient skulls of Titicaca owed their strange configuration to a process which we know is capable of explaining the phenomena, than that they constituted an original race,—a circumstance of which we have no other evidence than that derived from the shape of the cranium." The accompanying sketch is copied from one which he gives of the infant skull of the Columbian tribes,



and which, he says, will afford an accurate idea of the form of the head produced by pressure. This head itself, if we

* "Blumenbach de Generis Humani Varietate Natura, p. 220." [In the English translation of Malte Brun's Geography, i. 540, the practice is said to exist still in Peru; but no reference is given.—ED.]

mistake not, we saw a few years ago, either at Dublin, or in the Museum of the Andersonian University at Glasgow.

It will be remembered by some of our readers, that, at the meeting of the British Association held at Edinburgh in September 1834, Mr Pentland brought the skulls in question under the notice of the Natural History Section.* He maintained the opinion that their shape was natural; and, on the assumption that such was the fact, and that their possessors had been members of a civilized community, Professor Graham of Edinburgh, at one of the evening meetings, took occasion to sneer at Phrenology, in contrasting the wretched cerebral development which they indicate with the architectural and other remains discovered in the locality from which they were brought.

The subject was next taken up by Dr Samuel Morton, in his *Crania Americana*, published at Philadelphia in 1839. Dr Morton's observations have already been so largely quoted in this Journal, vol. xiii., p. 353, that it is unnecessary to repeat them here. He gives various reasons for believing, *1st*, that some of the small-fronted, large-backed, low and narrow Peruvian skulls which he describes, retained their natural form, though in other examples he allows that pressure has been applied in exaggerating a natural peculiarity; and, *2dly*, that the people by whom heads so small and badly formed were possessed, instead of occupying, as might naturally have been expected, the lowest place in the scale of human intelligence, constituted the ancient civilized inhabitants of Peru, the remains of whose works are still to be seen.

Mr Hewett Watson, in a review of Dr Morton's work in the 13th volume of this Journal, p. 355, observes—"The presumption appears so strongly in favour of the view which identifies the people that left the architectural remains in question, with the race to which these skulls belonged, that we can scarcely entertain a doubt of the fact; though it may be just possible that the race with the mis-shapen skulls were the successors of the architects, because it is alleged that the Incas destroyed the inhabitants found in that part of Peru on their invasion, to such a degree that they had to re-colonise the depopulated tracts by people brought from other provinces. Another view may also be suggested as a conjecture, namely, Did the fashion for deformed heads come into vogue amongst the ancient Peruvians after these buildings had been erected, and, by inducing them to injure their own brains, thus become instrumental in bringing on the extinction of the race?"

A writer who has analysed the same work in the Medico-

* See our 9th volume, p. 123.

Chirurgical Review for October 1840, says—" We do not see that Dr Morton has ventured to determine, or succeeded in adducing evidence to prove, that the people deposited in graves of salt and sand at Atacama, or the ape-like race entombed at Titicaca, could have been endowed by nature with powers capable of designing and erecting the fore-described structural and architectural remains; far less, even, has he said or shewn that such heads ever devised or directed the construction of the works whose ruins are so interestingly depicted on his pages as to fascinate the attention of artists and antiquaries. On the belief that the ttypal skull is quite natural and free from artificial distortion, we conclude that such a people never did or could produce such works; that the excavations, structures, monuments, and sculptures, were the workmanship of a race anterior to that which preceded the Incas; and that the men whose corpses now moulder in the tombs of Titicaca profaned the fabric of a nobler race by appropriating them for sepulchres" (p. 458). He adds that, if the possessors of the skulls in question " really did design and rear these works, and had heads denaturalized by mechanical appliances—as we can discover much reason to suspect it was—then had this people their heads converted into monstrosities, and consequently perverted into objects not amenable to this or any other law for directing the judgment of nature" (p. 460).

A review of the *Crania Americana* in Silliman's American Journal of Science and Arts, vol. xxxviii., contains the following passage:—" There is a discrepancy between Dr Morton's description of these skulls and the civilization ascribed to their possessors, which is unique in his work. In every other race, ancient and modern, the coincidence between superior cranial forms and superior mental qualities is conspicuous." The reviewer proceeds to notice certain measurements, which, in his opinion, shew a superiority in the region of the observing organs in the ancient race, and in that of the reflecting organs in the modern—indicating " a larger quantity of brain in the anterior lobe of the extinct race, than Dr Morton's description leads us to infer. This subject obviously requires further elucidation."

" If these skulls," adds the same writer, " had been compressed by art, we could have understood that certain portions of the brain might have been only displaced, but not destroyed; . . . we might suppose the anterior lobe, in cases of compression, to be developed laterally or backwards, and still preserve its identity and uses." In a postscript, the reviewer adds the following information:—" When the present sheet was in the press, we received a letter from Dr Mor-

ton, in which he says,—‘ Since that part of my work which relates to the *ancient Peruvians* was written, I have seen several additional casts of skulls belonging to the same series, and although I am satisfied that Plate IV. fig. 4, p. 361, represents an unaltered cranium, yet, as it is the *only unaltered one* I have met with among the remains of that ancient people, I wish to correct the statement, too hastily drawn, that it is *the cranial type* of their nation. My matured opinion is, that the ancient Peruvians were a branch of the great Toltec family, and that the cranium had the same general characteristics in both. I am at a loss to conjecture how they *narrowed the face* in such due proportion to the head; but the fact seems indisputable. I shall use every exertion to obtain additional materials for the farther illustration of this subject.’ ”

Mr Combe, in his Notes on the United States of North America, vol. i. p. 140, states, that he saw in Dr Warren's collection of skulls, in the Medical College at Boston, “ several casts of skulls said to have belonged to a race of ancient Peruvians who preceded the present Inca family. They are exceedingly narrow and depressed in the forehead, and extend to an extraordinary length backward from the ear. In strange discord with this organization, we are told that this people manifested high intellectual qualities; that they were civilized, powerful, and the authors of magnificent architectural works, the ruins of which still attest their greatness. The question has often been asked, how phrenologists reconcile these facts with their doctrines? At present we can give no answer on the facts as stated, except that we doubt their accuracy. Great ruins, and some extraordinary skulls, have been found in the same locality, and it has been assumed that these skulls, of which few have reached us, are fair average specimens of the crania of the builders of these works; and it is thence argued that Phrenology cannot be true. The number of skulls hitherto exhibited, however, is so small, that it may be quite possible that they are *abnormal* specimens selected as curiosities on account of their odd appearance; and even if such skulls abound, how can we be certain that any of them belonged to the men who planned and superintended the execution of the works? An inferior and enslaved race may have laboured under the direction of powerful minds.”

Lastly, the subject was discussed at Plymouth in 1841, as already noticed at the commencement of this article.

What, then, are the bearings of the facts and opinions here collected, upon Phrenology?

In the first place, it does not seem to have been made out,

—nor, indeed, would it be an easy task to demonstrate,—that the persons whose skulls are found in the Peruvian tombs were the civilized projectors and constructors of these and the other remains of art; though certainly the *probability* is that such was the case. Upon that assumption, and the further supposition that the form of the skulls is natural, and in general bad, Phrenology would be considerably at fault.

But, secondly, there is now very good reason for the belief, that these monstrous skulls have been distorted by artificial means, and thus removed beyond the pale of phrenological observation.* The decided opinions of Professor Owen and Dr Scouler to that effect have already been quoted; and we have seen that in only *one instance* does Dr Morton consider the skulls examined by him to be unaltered. To the same effect is the testimony of Mr W. F. Tolmie, a surgeon in the Hon. Hudson's Bay Company's Service, who resided for several years at Columbia River, and, like Dr Scouler, bestowed much attention upon the skull-distorting practices of the Indians in that region. Having met this intelligent phrenologist in Edinburgh last winter, we brought under his notice the report of the discussion at Plymouth, shewed him the two skulls from Arica, and requested him to inspect, when in London, such of Mr Pentland's skulls as are deposited there. On examining the Arica skulls, Mr Tolmie expressed the fullest conviction that their forms were artificial; and in a letter dated London, 19th January 1842, he has since favoured us with the following particulars: "I have to-day examined the Titicacan skulls in the Museum of the Royal College of Surgeons, and compared, at Deville's, casts of the Titicacan skulls with a cast of old Concomly, once a Flathead chief of wealth and importance amongst the Chenooks at the entrance of the Columbia River, and a conspicuous character in 'Ross Cox's Adventures,' and, if I mistake not, in Washington Irving's 'Astoria.' I coincide in opinion with Professor Owen, that the form of the Titicacan head has been artificially produced by pressure applied all round the skull, and think Mr P. F. Bellamy's reasons inconclusive in support of the contrary belief. His first reason for supposing the formation natural is, 'that the peculiarities are as great in the child as in the adult, and indeed more remarkable in the younger individual than in the elder.' Now this I would adduce as a proof that the formation is artificial; for when the NW. American infant is released from the compressing apparatus, its head is more flattened and deformed than at any subsequent period. On

* "We are very far from applying craniology to deformities resulting from violence."—Gall on the Functions of the Brain, Lewis's Transl., iii. 16.

the second reason I have nothing to remark. On the third I would observe, that the occipital bone occupies the same position in the cast of Concomly that it does in the Titicacan ones. As to the fourth and fifth—Professor Owen pointed out a slight concavity passing over the occipital, parietal, and frontal bones, and Mr Ball discovered a band which appeared to have been used for compressing the head. The Chenook mode of compressing the head would produce elevation of the vertex, and lateral projection ; but a circular band applied as the concavity indicates, would effect a contraction and depression of the anterior, with an elongation and projection of the posterior, portion of the head, as observable in the Titicacan skulls.”

As to the *consequences* of artificial alteration of the form of the skull, Mr Tolmie says,—“ Since 1838 I have particularly endeavoured, by personal observation and inquiry, to ascertain the effect of compression on the mental manifestations, and have come to the conclusion that mere displacement of the organs is the sole effect ; for it is conceded by all persons acquainted with the natives of NW. America, that the Flatheads evince as much intellectual and moral capability as their round-head neighbours, either to the north or south.”

“ There is considerable dissimilarity,” adds Mr Tolmie, “ in the shapes given to the cranium by different tribes, and the members of each consider their own form of head as the standard of beauty, and speak disparagingly of that preferred by their neighbours ; but an upright forehead is considered by all the Flatheads as the extreme of ugliness, and the term *Quakatchoose* (high forehead or roundhead) is the first vituperative an angry Chenook thinks of using towards any white man or Sandwich Islander who may have incurred his or her displeasure.

“ The Flatheads greatly admire a broad and flat forehead, and, in speaking of an individual as handsome, advert to the expanse and depression of the anterior part of his head as the point most deserving commendation. So strongly are they wedded to the practice, that, although in the course of five years I frequently made the attempt, I succeeded in only one instance in prevailing on an Indian couple to omit it ; and so much were they ridiculed as *innovators*, that on the succeeding birth they employed the compressing apparatus as usual. Sloughing of the integuments is an occasional consequence of the flattening process ; and the unfortunate infants, while undergoing it, have a most hideous and unnatural appearance ; caused by the extreme flatness of the forehead, and the undue

prominence of the eyeballs, which seem as if starting from the sockets like those of a mouse strangled in a wire-trap. The head of the adult is not nearly so much altered in shape as that of the infant ; because during the period of growth there is a progressive, though partial, return to the natural form." Mr Tolmie has presented two skulls of Flatheads to the Phrenological Society (National Skulls, Nos. 265 and 266).

Speaking of the same tribes of Indians, Dr Scouler says, "The process is slow and gentle, so that the child does not appear to suffer in any way from so unnatural a process, nor do the intellectual qualities of the individual appear to be in any degree affected by it ; on the contrary, a flat head is esteemed an honour, and distinguishes the freeman from the slave."*

At a meeting of the Medical Section of the British Association at Liverpool in September 1837, Dr Warren of Boston is reported to have said, in reference to a race of North American Indians with "heads almost as flat as a pancake," that, "so far from the intellects of these flat-headed persons being inferior, the Indians who possessed them were quite equal in intelligence to those of the same nation. He had the head of a celebrated American chief, who had a most extraordinarily flattened forehead, and he was known to have remarkable talent. In fact, no person was thought of any consequence in that country unless he possessed a flat head."†

We find in the *Edinburgh Medical and Surgical Journal*, vol. liii. p. 521, the following extract from *Sporting Excursions in the Rocky Mountains*, by J. K. Townsend, Esq. "A custom prevalent and almost universal amongst these Indians (the Klikatats), is that of flattening or mashing in the whole front of the skull, from the superciliary ridge to the crown. The appearance produced by this unnatural operation is almost hideous, and one would suppose that the intellect would be materially affected by it. This, however, does not appear to be the case, as I have never seen, with a single exception (the Kayouse), a race of people who appeared more shrewd and intelligent. I had a conversation on this subject a few days since with a chief who speaks the English language. He said that he had exerted himself to abolish the practice in his own tribe ; but although his people would listen to his talk on most subjects, their ears were firmly closed when this was mentioned ; they would leave the council fire, one by one, until none but a few squaws and children were left to drink in the words of the chief. It is even considered among them a

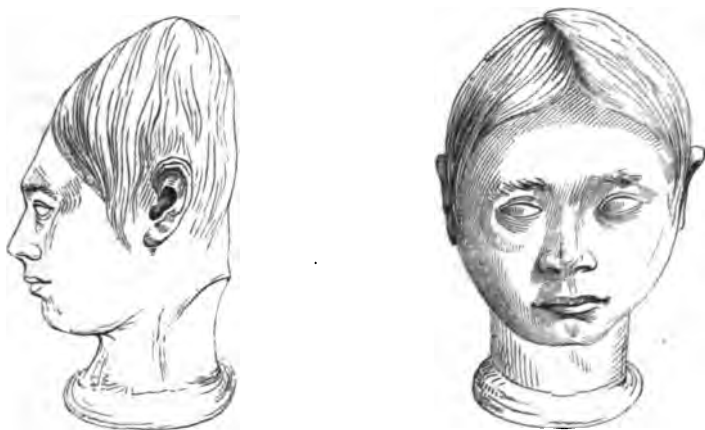
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degradation to possess a round head ; and one whose caput happens to have been neglected in his infancy, can never become even a subordinate chief in his tribe, and is treated with indifference and disdain, as one who is unworthy of a place amongst them.”*

Of the distorted heads of the Indians of the Columbia River, Dr Morton says, that “ the absolute internal capacity of the skull is not diminished, and, strange as it may seem, the intellectual faculties suffer nothing ; the latter fact is proved by the concurrent testimony of all travellers who have written on the subject.” He adds that in January 1839 he had an interview with a full-blood Chenook, named William Brooks, and aged 20 years, who had been three years in charge of some Christian missionaries, and had acquired great proficiency in the English language, which he understood and spoke with a good accent and general grammatical accuracy. His head was as much distorted by art as any skull of his tribe in Dr Morton’s possession. . . “ He appeared to me,” adds Dr M., “ to possess more mental acuteness than any Indian I had seen ; was communicative, cheerful, and well-mannered.”

The case of a flat-headed Indian named Thomas Adams,



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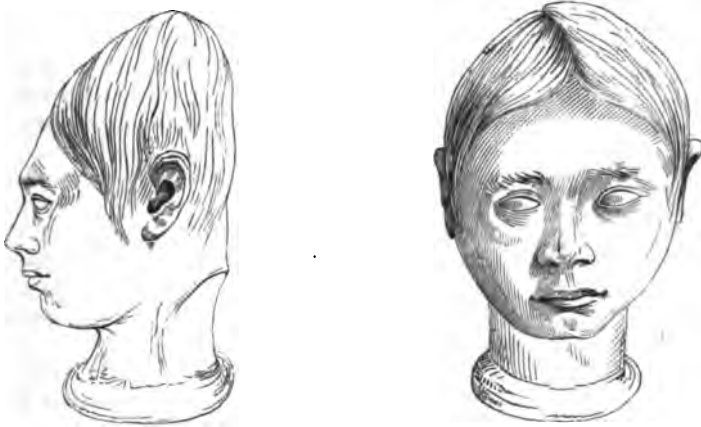
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fairly developed), he was intelligent, ready, and fluent ; but on others which required the aid of Comparison and Causality, he was dull, unintelligent, and destitute equally of ideas and of language. Thinking that probably he did not understand the words used on these topics, Mr C. tried to explain them, but encountered an obtuseness of comprehension which foiled every attempt. He found "those intellectual powers to be of tolerable strength whose organs were fully developed, and those to be deficient whose organs were small." The temper of the Indian was described to him as warm and touchy. We think with Mr Combe that it is of much importance to distinguish between the manifestations of the knowing and reflecting faculties in judging of the "cleverness" or "intellect" of such individuals ; but it seems questionable whether a person with even a good development of the superior region of the forehead, would, if brought up among savages, exhibit tolerable manifestations of the reflecting faculties. Even in our own country, multitudes of uneducated persons who have never been trained to reason or to lay plans for the future, are found incapable of understanding ideas and language which fall within the province of Causality. Besides, in the case of Adams (as Dr Gregory remarked during the discussion which followed the reading of Mr Combe's communication), the cerebral development, although agreeing in many particulars with the mental qualities of the individual, still, in some points, does not appear, from the information possessed, to correspond with them so completely as might be looked for if the convolutions were not displaced. The organs of Destructiveness and Firmness, for example, he remarked, were exceedingly prominent ; but it did not appear that the manifestations were in equal excess. Dr Gregory was inclined to think that the cerebral organs, besides being removed from their ordinary places by the force applied, are somewhat diminished in size, or at least are prevented from growing so large as they would become under natural circumstances.

On the whole, it seems to us probable that mere displacement of the organs, without any material effect on their functions, is the result of artificial distortion of the head. But we trust that farther investigations will be made by those who enjoy the necessary opportunities. Dissection of the brains of flat-headed Indians may be expected to throw much light upon this interesting subject ; and as Mr Tolmie is about to return to the Columbia River, we hope to have the pleasure of laying before the public at some future time the results of his further observations. Meantime the present summary of what is already known may be useful in directing inquiry.

IV. *Punishment of Death.*

The period has now arrived, when the great experiment of replacing by more moderate penalties the exterminating enactments of former times—has been tried by the test of full experience ; and the COMMITTEE of the ANTI-CAPITAL PUNISHMENT SOCIETY congratulate the public upon the eminent success which has marked the transition from a system of indiscriminate rigour to one of great comparative mercy.

In the year 1821 there were 114 executions in England and Wales. In 1828, the number was reduced to 59 ; in 1836, to 17 ; and in 1838, it was only 6.

That this change has been effected without diminishing, even in the slightest degree, the security of the persons and properties of men, is a matter of the clearest evidence, the evidence of actual experience, which cannot be disputed or falsified. The Government returns prove, that there have been *fewer* highway robberies in the last seven years, with 5 executions, than in the preceding seven years, with 58 *executions* ; that there have been *fewer* acts of burglary and housebreaking in the last seven years, with only 2 executions, than in the preceding 7 years when 57 persons suffered death for those crimes ; and that there has been *less* horse-stealing in the last seven years, *without any execution*, than in the preceding seven years, during which, for that offence alone, 22 convicts were sent to the scaffold.

Whatever experience has been acquired by this unexampled reform in the administration of public justice, has, at least, been safely and innocently gained. Some hundreds of offenders, had they committed their crimes a few years before, would have died by the hand of the executioner. They have been allowed to live. Life, the only season of repentance, with all its opportunities of regaining the favour of an offended Deity, has been mercifully continued to them ; and from this lenity society has derived no injury, no loss. Who then can fail to rejoice at a result so consoling to humanity ?

One question only remains.—Reflecting men will ask, after so many accumulated proofs of the *inefficacy of capital punishment*, *Why should it be retained at all ?* Reasoning minds will enquire,—Is the execution of 6 persons in a year so essential to social security, that we must still continue to uphold the revolting machinery of the scaffold ?

For murder no less than other crimes, the penalty of death, as an example, is momentary, and of no beneficial effect :—it disgusts the good, and brutalizes the bad, who witness the spectacle of man cruelly destroyed by man ;—as an act of ex-

treme violence, it teaches violence to the people :— as an act of deliberate homicide, it diminishes the regard due to the sanctity of life, and renders murder less revolting to the un-instructed mind. *For murder as well as other crimes*, it too often leads to impunity through the suppression of evidence by the associates or acquaintance of the criminal, who recoil at the thought of becoming accessory to the death of one with whom they had formerly lived on terms of familiar intercourse.

The COMMITTEE invite the attention of the public to the important fact, that there have been *fewer* commitments for murder in the last five years, when the executions for that crime were 40 [or 8 *annually*] than in the five years preceding, when the executions were 66 [or 13 *annually*]. Similar results have followed the partial disuse of the punishment of death for murder in France and Prussia ; and in Belgium, the discontinuance of the capital penalty, during five successive years ending with 1834, was accompanied by a *diminution* in the number of *murders*. Thus experience proves, that in order to render the laws against crime *reformatory*, they must cease to be *vengeful*.

It is true the punishment of death is judicially said, like all other punishment, to be, not for revenge but example :— but as it has notoriously failed in the way of *example*, what purpose can its infliction serve unless the gratification of *revenge* ? Let it then be entirely repealed, and some punishment substituted which does not shock the natural feelings of mankind, and is therefore more capable of uniform execution ! By the abolition of it we should teach men forbearance by the high example of the laws, and inculcate the sacredness of life on that supreme authority ; while the retention of it for murder answers none of the real ends of justice, but serves only, by exacting “ blood for blood,” to encourage a savage spirit of retaliation, at utter variance with the gentle temper of Christianity, and itself the fruitful parent of atrocious crimes.

WILLIAM ALLEN,
Chairman of the Committee.

40 TRINITY SQUARE, TOWER HILL, LONDON,—1841.

1. PARLIAMENTARY RETURNS shewing the good results which have hitherto followed the disuse of the Punishment of Death.

LONDON AND MIDDLESEX.—For crimes capital in 1828.—From Parliamentary Return, No. 165, printed 1837.

3 years	1828-29-30	Executed	52	Committed	960
ditto	1831-32-33	Executed	12	Committed	896
ditto	1834-35-36	Executed	none	Committed	823

The foregoing shews *a decrease* of the crimes that *were capital* in the first period. During *the same three periods* (in London and Middlesex), the committals for *minor offences increased*, being respectively 9513—10,049—and 10,006.

The same, for ENGLAND AND WALES. From Parliamentary Return, No. 547, printed 1839.

[Embracing longer periods, viz. five years.]

5 years 1829-30-31-32-33	Executed 259	Committed 11,982
ditto 1834-35-36-37-38	Executed 99	Committed 11,332

This return also shews *a decrease* of the crimes that *were capital* in the first period. During *the same time*, the committals for *minor offences* (i. e. offences *not capital* in the year 1828) *increased*; being 85,348 in the first period, and 99,540 in the second period.

The fact is thus established upon unequivocal testimony—the evidence of the Government Records, that *in the same country, among the same classes of the people, and at the same time—under circumstances therefore precisely the same,*—while crime in general was *increasing*, there was a *diminution* in the number of those offences for which the punishment of death was partially discontinued or altogether abolished, and another penalty substituted, which has not, by deterring prosecutors or witnesses from coming forward, or preventing juries from convicting, *given encouragement to crime*.

That juries are prevented from convicting in many cases where the offender's *life* is in jeopardy, can be no longer matter of dispute. It is distinctly proved by various official documents, one of which, of a statistical character (*Parl. Paper, No. 87, 1840*) may be cited here. The document in question embraces two consecutive periods, each of three years:—

In the first of those periods it will be seen that executions were frequent; and that the average number of *convictions* was only 49 for every 100 *committals on capital charges generally*.

In the second of those periods executions were rare, and the *convictions upon the same charges* averaged 59 per cent: the consequence, therefore, on calculation will be found to have been, that 310 offenders were prevented from being released with impunity by verdicts of acquittal.—The official return is in substance as follows:—

No. 87—1840. ENGLAND AND WALES.		Three Years ending Dec. 1836.	Three Years ending Dec. 1839.
Executions, - - - - -		85	25
Commitments for offences which were capital in 1834, - - - - -		3104	2989
Convictions for the same offences, - - -		1536	1788
<i>Centesimal proportion of convictions to commit- ments, - - - - -</i>		49	59

2. PARLIAMENTARY RETURNS favouring the inference that the Punishment of Death might be abolished in the case of Murder, not only with safety but with advantage.

Murder.—ENGLAND AND WALES. From Parl. Return, No. 48, printed Sept. 1841.

[Twenty years, divided into four periods.]

PERIODS, - - - - - {	5 Years ending 1825.	5 Years ending 1830.	5 Years ending 1835.	5 Years ending 1840.
Committed, - - - - -	383	317	339	291
Convicted, - - - - -	88	74	81	87
Executed, - - - - -	76	65	66	40
<i>Centesimal proportion of execu- tions to convictions, - - -</i>	86	87	81	45
<i>Centesimal proportion of convic- tions to committals, - - -</i>	22	23	23	29

Here it is seen that in the last period, when executions became less frequent, the crime of murder became less frequent; and that juries *convicted* one-fourth more criminals, namely, the centesimal proportion of 29 instead of 23. Had they convicted the same proportion in the first three periods, 67 more offenders, who escaped with impunity, would have been returned as "guilty."

Farther.—In 1840, a parliamentary return, No. 87, was printed, shewing, for five consecutive years, the number of persons sentenced to death for *murder* "whose punishment *was commuted*; specifying the *counties* in which their crimes occurred, and stating the number of commitments for *murder* in the same counties, during the same year, and in the follow-

ing year." This return exhibits a striking fact, namely, that *in not a single instance* was there an increase of the crime, although those *commutations* of the sentence of death extended over fifteen different counties.

In the present year, 1842, another document, No. 36, has been printed by order of Parliament. It exhibits the number of executions, for all crimes, in London and Middlesex, during 21 years, divided into seven *triennial* periods; together with the committals on charges of murder. In one of these periods, namely, the three years 1834, 1835, 1836, *no execution whatever* took place; and it is distinctly shewn upon official authority, that *that was the only period in which there were no convictions for the crime of murder.*

Are not these results in favour of the entire discontinuance of the punishment of death?

V. *On the Loss of the Faculty of Speech depending on Forgetfulness of the Art of using the Vocal Organs.* By JONATHAN OSBORNE, M.D. (From the Dublin Journal of Medical and Chemical Science, vol. iv. p. 157.)

The power of recollecting names is well known to be possessed in unequal degrees by different individuals. We all have, on various occasions, experienced a difficulty or impossibility of recalling the name of some person passing us in the street, although not only the countenance, but also the circumstances of time and place of former acquaintance, were deeply engraven on the memory. Some experience an inability of remembering some one name, although capable of retaining others to an indefinite extent. Thus it is related, that Man-jeti could never recollect the name of the *anagallis arvensis*, although he annually demonstrated that plant in his course of botanical lectures. In learning languages, some words are retained at once, while others can with difficulty be acquired, even with the most persevering repetition. Those instances are, for the most part, to be referred either to defective attention, or to a want of that chain of association on which memory is known to depend. Both in health, and under the influence of disease, we find the most common failures of memory amongst nouns, and especially amongst proper names, in consequence of their being less frequently repeated than verbs or

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Are not these results in favour of the entire discontinuance of the punishment of death?

V. *On the Loss of the Faculty of Speech depending on Forgetfulness of the Art of using the Vocal Organs.* By JONATHAN OSBORNE, M.D. (From the Dublin Journal of Medical and Chemical Science, vol. iv. p. 157.)

The power of recollecting names is well known to be possessed in unequal degrees by different individuals. We all have, on various occasions, experienced a difficulty or impossibility of recalling the name of some person passing us in the street, although not only the countenance, but also the circumstances of time and place of former acquaintance, were deeply engraven on the memory. Some experience an inability of remembering some one name, although capable of retaining others to an indefinite extent. Thus it is related, that Manjeti could never recollect the name of the *anagallis arvensis*, although he annually demonstrated that plant in his course of botanical lectures. In learning languages, some words are retained at once, while others can with difficulty be acquired, even with the most persevering repetition. Those instances are, for the most part, to be referred either to defective attention, or to a want of that chain of association on which memory is known to depend. Both in health, and under the influence of disease, we find the most common failures of memory amongst nouns, and especially amongst proper names, in consequence of their being less frequently repeated than verbs or

prepositions, which, being in use on every topic which can form the subject of discourse, are retained, when the names of general topics, as nouns, or of individual topics, as proper names, are forgotten.

There are two kinds of loss of memory of language ; the first, which is usually connected with softening of some portion of the brain, is most frequently witnessed in advanced age. This is characterized by an imperfect recollection of dates, and names of places and persons ; but as far as the muscular powers of articulation have not been impeded by paralysis, the faculty of language remains unimpaired, and the individual speaks with his usual facility, until all the faculties become involved in the disease, and total fatuity is the result.

The other imperfection, and that which it is proposed to illustrate in the following pages, involves language in all its parts nearly in an equal degree, except in the slighter forms, when proper names, or other words of less frequent occurrence, are alone affected. It does not consist in want of recollection of the word to be pronounced, but in a loss of recollection of the mode of using the vocal apparatus, so as to pronounce it. This peculiar affection comes on during all ages. Although appearing to arise from disease of the brain, or of some part thereof, yet it is not necessarily the precursor of any more serious affection, being sometimes transitory, while in other cases it exists unaltered for an indefinite space of time. The first case which came under my observation was that of a young lady, twelve years of age, whom I attended with the late Dr Brooke. She laboured under a severe and tedious gastro-enteritic fever. About the sixth day she lost the faculty of speech, yet continued perfectly sensible, and shewed, by her actions, that she understood every word that was spoken to her. She was an expert writer, and accepted with avidity the offer of materials for writing. When paper and a pencil were placed in her hands, she made several attempts to write, but was obliged to relinquish the undertaking before a single sentence was completed. This state lasted about five days, at the end of which time her speech suddenly returned, and she shortly afterwards became convalescent, and recovered. The second case was that of master B., aged seven, whom I attended in a gastro-enteritic fever, in conjunction with Dr Cheyne. In the progress of the fever, he gradually ceased to speak, and remained quite dumb for above a week. During this time he shewed that he understood all that was said in his hearing, did every thing which was required, and made repeated attempts to speak. His speech returned gradually ; and, after a tedious convalescence, he recovered. Dr

Cheyne, on this occasion, informed me, that he had seen another case of loss of speech without delirium or stupor, in a child under gastro-enteritis, which, after continuing above a week, ended favourably. In those two cases it is to be observed, that after recovery the patients could give no account of what had happened during their illness; but as this is a common occurrence in fevers, even when the sensorium is not perceptibly disturbed, it affords no evidence against what has been stated respecting the integrity of their intellects during the deprivation of the faculty of speech.

The third case was that of Robert Delany, admitted into Sir Patrick Dun's Hospital, 2d March 1830, with paralysis of the right arm and leg, in consequence of an apoplectic seizure, which took place above a month previously. He shewed by his actions that he perfectly comprehended every thing that was said to him. When asked a question, he always endeavoured to give an answer, but could only say, *bon te ui*, and a few other monosyllables, but no words of more syllables. He used to laugh as in health, and often seemed much amused at his ineffectual attempts to express himself. His mouth was drawn to the left side, the entire head inclined slightly to the right; and when he put out his tongue, it was protruded towards the right. This latter circumstance, however, does not interfere with speech, as we have daily opportunities of witnessing in paralytic cases. And in his mode of utterance there was not the difficulty and thickness of enunciation belonging to paralysis, when it affects the vocal organs, in which, although the indistinctness of the consonants often renders the whole unintelligible, yet it is evident that the vowels are correctly pronounced, and the number of syllables correctly given.

The fourth case, and that to which I am most desirous to call attention, is that of a gentleman of about twenty-six years of age, of very considerable literary attainments. He was a scholar of Trinity College, and has been a proficient in the French, Italian, and German languages. About a year ago he was residing in the country, and indulged the habit of bathing in a neighbouring lake. One morning, after bathing, he was sitting at breakfast, when he suddenly fell in an apoplectic fit. A physician was immediately sent for; he was bled, and after being subjected to the appropriate treatment, he became sensible in about a fortnight. But although restored to his intellects, he had the mortification of finding himself deprived of the gift of speech. He spoke, but what he uttered was quite unintelligible, although he laboured un-

der no paralytic affection, and uttered a variety of syllables with the greatest apparent ease. When he came to Dublin, his extraordinary jargon caused him to be treated as a foreigner in the hotel where he stopped ; and when he went to the college to see a friend, he was unable to express his wish to the gate-porter, and succeeded only by pointing to the apartments which his friend had occupied.

After he came under my care, I had ample opportunities of observing the peculiar nature of the deprivation under which he laboured ; and the circumstance of his having received a liberal education, enabled me to ascertain some peculiarities in this affection, which would not otherwise have come to light. They were as follows :—

1. He perfectly comprehended every word said to him ; this was proved in a variety of ways unnecessary to describe.

2. He perfectly comprehended written language. He continued to read a newspaper every day, and, when examined, proved that he had a very clear recollection of all that he read. Having procured a copy of Andral's Pathology in French, he read it with great diligence, having lately intended to embrace the medical profession.

3. He expressed his ideas in writing with considerable fluency ; and when he failed, it appeared to arise merely from confusion, and not from inability, the words being orthographically correct, but sometimes not in their proper places. I frequently gave him Latin sentences, which he translated accurately. He also wrote correct answers to historical questions.

4. His knowledge of arithmetic was unimpaired. He added and subtracted numbers of different denominations with uncommon readiness. He also played well at the game of drafts, which involves calculations relating to numbers and position.

5. His recollection of musical sounds I was not able to ascertain, not knowing the extent of his knowledge of music before the apoplectic seizure ; but he remembered the tune of " God save the King ;" and when " Rule Britannia " was played, he pointed to the shipping in the river.

6. His power of repeating words after another person was almost confined to certain monosyllables ; and in repeating the letters of the alphabet, he could never pronounce *k*, *q*, *u*, *v*, *w*, *x*, and *z*, although he often uttered those sounds in attempting to pronounce the other letters. The letter *i* also he was very seldom able to pronounce.

7. In order to ascertain and place on record the peculiar

imperfection of language which he exhibited, I selected the following sentence from the by-laws of the College of Physicians, viz., "*It shall be in the power of the College to examine or not examine any Licentiate, previously to his admission to a Fellowship, as they shall think fit.*" Having set him to read this aloud, he read as follows: "*An the be what in the temother of the trothotodoo to majorum or that emidrate ein einkrastrai mestreit to ketra totombreidei to ra fromtreido asthat kekritest.*"

The same passage was presented to him in a few days afterwards, and he then read it as follows:—" *Be mather be in the kondreit of the compestret to samtreis amtreit emtreido am temtreido mestreitero to his eftreido tum bried rederiso of deid daf drit des trest.*"

We observe here several syllables of frequent occurrence in the German language, which probably had made a strong impression on his memory; but the most remarkable fact connected with his case was, that although he appeared generally to know when he spoke wrong, yet that he was unable to speak right, notwithstanding, as is proved from the above specimen, he articulated very difficult and unusual syllables, and was completely free from any paralytic affection of the vocal organs.

A similar case occurred last year (1832) in Stevens' Hospital, which has been described in the Dublin Medical Journal by the Surgeon General. In consequence of a sabre wound received on the top of the head, portions of the brain came away, and the patient, although sensible, and able to resume his ordinary avocations, yet was deprived of the faculty of speech. This peculiar state is in these observations described as arising from a loss of the memory of names, while the memory of things remained unimpaired. Both in this case, however, and in that which I have last related, it is to be particularly observed, that the patients understood every thing that was said,—a circumstance utterly inconsistent with the supposition that they had lost the recollection of names, and in my case it was an absolute impossibility that this gentleman should write translations of Latin sentences, if the memory of names was lost. The recollection of things can only be the recollection of previously received sensations. It is obvious that those were retained; it is also obvious that the recollection of the meaning of words was retained; and it now remains to be inquired, wherein does this peculiar imperfection of language consist?

Memory is engaged on two great classes of objects; the first comprising all the sensations which have been received

by the individual ; the second, the actions which he has become capable of performing by means of his voluntary muscles. The sensations received, either by external impressions, or by reflection on ideas thence derived, constitute the stock of knowledge possessed by each individual. All the facts, circumstances, languages, proper names, sensible qualities of bodies, scientific propositions, judgments, or prejudices respecting individuals, which are retained in the memory, are there, as it were, lodged in a store, forming a possession, of the extent of which the owner is not at any time conscious, except by recollecting that on former occasions he has drawn them forth, and believes that it is in his power to do so again. The number of those recollections is, even in the most ignorant, beyond all powers of calculation. As they hang together by association, and can be revived only by this kind of connexion, it follows, as a necessary consequence, that the memory is not immediately subject to the will of the individual, who frequently is disappointed in his endeavours to excite a train leading to the idea he seeks. The memory being thus in an independent state, we are obliged, in order to reduce it into subjection, to contrive systematic arrangements and other means, which, by multiplying chains of association, enable us to penetrate into and select the contents of this store, according as they may be required.

The second class of objects of recollection, is that of the actions of our voluntary muscles. The importance of this knowledge immediately on birth, has required that instinct should be granted. The chicken, on extricating itself from the egg, is able to feed itself, and the new-born infant is also able to suck ; the latter operation requiring a vacuum to be formed, by withdrawing the tongue from the front to the back of the mouth, in a way which some, at a later period of life, find difficulty in accomplishing. The great majority of muscular actions, however, have been learned by education. The art of walking is acquired by imitation, and the progress made is very gradual. In acquiring language, after understanding what is spoken, the next attainment is, by imitation, to pronounce the most necessary monosyllables. Grammatical inflections are the longest to acquire, because the child is obliged, from experience alone, to form rules for both declensions and conjugations, and children always continue to use regular forms for irregular nouns and verbs, until better instructed by exercise and observation.

After the art of speaking, the art of writing occupies the most important place ; and during the years of childhood, a

constant practice is continued, by which, from the first formation of letters, we advance, till at length we are able to set down whole sentences, with a rapidity almost equal to that of thought. Other muscular actions, such as leaping, dancing, riding, fencing, are acquired by practice alone; even the art of playing on musical instruments requires not so much a knowledge of the theory of their performance, as that the muscular apparatus shall be trained to execute actions in a certain order of succession, and in a space of time so short, that they can only receive the first impulse of the will, and must be able of themselves to carry on the series of actions which has once been commenced. To illustrate this chain of associations in certain systems of muscles, we may refer to a musician, who happens to commence the first few notes of a tune which was before forgotten, but having made the commencement, he is now able to continue it in a way which excites his own astonishment; or a fluent speaker delivering an extempore discourse—while he is in the act of uttering one sentence, he is necessarily engaged in thinking on the next. He must therefore have the faculty of setting the machinery of speech to the beginning of the sentence, trusting to the peculiar memory depending on associate objects for its continuance, and releasing himself from the care of pronouncing the individual syllables of which it is composed. The memory of muscular action resembles that of sensation in being in a great measure passive, and dependent on association, and is excited by performing those motions which have habitually preceded it.

When we reflect on the number of words in any language, with their grammatical inflections, and consider that each of those requires for its pronunciation a certain definite action of the muscular apparatus of the organs of speech, it appears almost impossible that we should recollect all the minute particulars necessary for working the machinery of the vocal apparatus, so as to produce such varied effects; and yet all, even in childhood, acquire the art of working this apparatus, and retain it so strongly, that it does not slip from the recollection, even when old age brings on loss of memory along with its other infirmities. It is the loss of this peculiar art, which characterizes the affection now before us. In the case of stammering, it is obvious that the patient knows the mode in which the word is to be pronounced, inasmuch as he sounds the first letter of it, but that he is prevented from finishing it by debility or spasm on the part of the muscles, causing them to resist his efforts. In my patient, on the contrary, the word

which he could write, and the meaning of which he knew perfectly, he was unable to commence the first syllable of, and instead of it, uttered words compounded from foreign languages. His ear afforded him very little assistance, as his attempts to repeat what had been read were scarcely better than his reading. The organs were not paralysed, neither were they affected by spasm, nor was he ignorant of the sounds to be uttered ; it only remains then, that he must have been ignorant of the art of producing those sounds ; and as he was previously in possession of this art, we are justified in asserting that he forgot it.

The question now occurs, Why should he have forgotten the art of speaking, while he retained the art of writing? Writing is performed by combinations of only twenty-four letters, by which all articulate sounds are expressed. In speaking, there must be a separate motion of the vocal organs for each syllable or combination of letters, and the more those syllables resemble each other, the more delicacy is required for their distinct pronunciation. The combinations of syllables introduce difficulties, arising from the new position which the parts are forced to assume in changing from one to another ; and to these are to be added, the peculiarities of accent and quantity. Thus, speaking appears to be more complex and difficult than writing. The chief cause, however, of our patient being deprived of the one faculty and not of the other, is evidently this, that the nerves concerned in the muscular apparatus of speaking, proceed from the brain and highest portions of the spinal chord, and are consequently liable to be disturbed by apoplectic seizures, or other cerebral affections, while the nerves concerned in writing, being derived from the cervical plexus, are unaffected, except by such causes as may produce paralysis.

There is in the *Ephemerides Curiosæ* a case which strikingly shews, that the art of writing is less liable to be forgotten than that of speaking. A man, sixty-five years of age, in consequence of apoplexy, could not read, or even distinguish one letter from another ; but if a name or phrase was mentioned to him, he could write it immediately with the strictest orthographical accuracy. What he had thus written, he was incapable of reading or distinguishing ; for if asked what a letter was, or how the letters were combined, it became evident that the writing had been performed only by custom of writing, without any exercise of the judgment. In this case, none of the means which were employed were successful in restoring the knowledge of letters.

In the first case mentioned in this paper, there was inability of writing, but it will be recollected that this occurred during the height of a gastro-enteritic fever. Febrile excitement of the muscles causes frequently an inability even to sign the name, although the intellects remain undisturbed. The loss of the memory of performing muscular action, by which the art of working a certain apparatus is lost, appears to occur almost exclusively to the organs of speech. Hence, while we have many instances of persons pronouncing one word when they intended another, we have no instance whatever of an individual running when he wished to stand, or leaping when he wished to sit down.

In either paralytic or spasmodic affections of the limbs, it is evident that the patient is prevented from executing the required motions, by actual inability of procuring the necessary muscular contractions. But except in as far as he is thus prevented, he performs the required motion, and performs no other. The contrary takes place in the affections of speech to which we have directed our attention, in which the effect produced is altogether, and in every part of it, different from what was intended.

The lesion of the brain which produces this affection appeared, in two cases, to be situated near the vertex. The first was the case which occurred in Stevens' Hospital, described by Mr Crampton, and already alluded to. The wound was inflicted by a sabre, on the most convex portion of the parietal bone; it was about five inches long, and penetrated into the brain. The second case was that of a French soldier, who, at the battle of Waterloo, was struck by a bullet at the exterior of the forehead, 6 or 8 millimetres from the left eye-brow, and in the point corresponding to the curved line in the temporal fossa. He fell senseless, and remained two days and nights on the field of battle. He was conveyed to Brussels, and although many attempts were made to extract the ball, they proved fruitless. Bleeding, however, and other remedies, were adopted, to remove paralysis of the side, and other symptoms of compression which had set in. After some months he was received into the military hospital at Paris. The wound, on examination, presented an inflamed circumference, and in the centre, the ball was imbedded into the substance of the os frontis to that depth, that the half of it must have projected into the cranial cavity. In some time he was able for active service, *but never recovered the memory of proper names and of some substantives,* although all his intellectual faculties were unimpaired. He died of phthisis, and M. Larrey, who re-

lated the case at the Academy of Medicine, exhibited the skull with the ball firmly fixed in the above mentioned place, the internal table of bone having been fractured and forced inwards at the moment of the accident.

M. Bouillaud (*Traité de l'Encephalite*) has endeavoured to establish that loss of speech is connected with injury of the anterior lobe of the brain. Lallemand (*Lettres sur l'Encephalite*, lett. vi. p. 446), however, describes one case in which there was softening, not in the anterior lobe, but in the inferior part of the middle lobe, corresponding to the optic thalamus and corpora striata; and another, in which there was considerable alteration of the anterior lobe, yet without the slightest alteration of speech. I regret that I am not able to bring forward a dissection of any case, sufficiently clear from complication with other affections, to lead to a decision on the subject. The peculiar affection which we are considering, does not appear to be indicative of danger, as long as the intellects remain in their ordinary state, and as long as the individual remains free from fresh accessions of disease.

With regard to the prognosis of this affection.—Taken by itself, it evidently does not denote any fatal change to have occurred in the brain, and, in this respect, is less formidable than the insidious but progressively increasing loss of memory of dates and names, which comes on at the decline of life, accompanied with partial paralysis of the limbs, and which is almost always the result of softening of some portion of the brain, with a tendency to increase. In the first two of our cases it ceased, along with the gastro-enteritic fever, to which it had supervened. The progress of the third case I am unable to state; but in the fourth case, not only has the general state of health been much improved, but I am able to report a very decided proficiency in the art of speech attained, when I made examination about four months ago. On repeating the same by-law of the College of Physicians before mentioned after me, he spoke as follows: *It may be in the power of the College to evhavine or not, ariatin any Licentiate seviously to his amission to a spolowship, as they shall think fit.* More lately he has repeated the same by-law after me perfectly well, with the exception of the word *prier*, which he constantly pronounced *prier*. He also was able to repeat all the letters of the alphabet, except *d*, *k*, and *c*.

The treatment in this case was first directed to combat the apoplectic tendency, which appeared to continue some time after he was placed under my care. Repeated applications of leeches, a succession of blisters to the nape and occiput, mer-

curial purgatives, and shower-baths every morning, were the principal means employed, until this tendency appeared to be entirely removed. Although this improvement took place, yet it was not accompanied by any restoration of speech; and his nervous susceptibility, and dread of ridicule, which caused him to maintain a perpetual silence, precluded all hope, that in the ordinary intercourse of society, he might, by practice, recover what he had lost. Therefore, having explained to him my view of the peculiar nature of his case, and having produced a complete conviction in his mind that the defect lay in his having lost, not the power, but the art of using the vocal organs, I advised him to commence learning to speak like a child, repeating first the letters of the alphabet, and subsequently words, after another person. This was a very laborious occupation; at times he was able to pronounce syllables and words, which at other times he found impracticable, and he frequently laboured ineffectually to pronounce words, which he would pronounce when endeavouring to pronounce some entirely different word. The result, however, has been most satisfactory, and affords the highest encouragement to those who may labour under this peculiar kind of deprivation; there being now very little doubt, if his health is spared, and his perseverance continues, that he will obtain a perfect recovery of speech.*

Several cases are recorded of persons after wounds or apoplectic seizures, ceasing to speak their usual language, and resuming the use of some language with which they had been familiar at some former period. Those appear to be of the same nature as the present case; the recollection of one language and its train of associate actions being lost, it was most probable that the vocal organs should move in that train to which it had formerly been accustomed, and fall into the use of another language. It is highly probable that a similar occurrence would have taken place in our patient, if he had only cultivated one language beside English; but having been conversant with five languages, the muscular apparatus ranged about amongst them in such a manner that the result was the kind of polyglot jargon which we have endeavoured to describe, and which, being formed without any rule, was inconsistent with itself, and wholly unintelligible.

* We learn from Dr Osborne, that his patient went to the country, and, as he was informed, died of fever within a few months of the date of his paper. There was no dissection, or at least he could procure no account of such.—ED. P. J.

II. NOTICES OF BOOKS.

- I. *Grundzüge der Phrenologie, oder Anleitung zum Studium dieser Wissenschaft, dargestellt in fünf Vorlesungen.* Von R. R. NOEL, Esq. Erste Abtheilung. Dresden und Leipzig, 1841. 8vo. pp. 160. Mit sechs lithographirten Tafeln.

Principles of Phrenology, or an Introduction to the Study of that Science; in five Lectures. By R. R. NOEL, Esq. Part First. 8vo. pp. 160, with 6 lithographed Plates.

The appearance of this work, almost simultaneously with that of Dr Carus noticed in our last number, is a fortunate circumstance for the cause of phrenology in Germany. As formerly mentioned in this Journal, vol. xiv., page 199, Mr Noel delivered a lecture in the German language at Prague, in February 1841, to a select audience. This, and others which succeeded it, excited so much interest, that he has been induced to enlarge and publish them; and in his preface he says that the time appears now to have arrived when phrenology will raise her head in Germany, her native land. This remark we believe to be well founded. On former occasions (vols. x. 698; xi. 22; and xii. 41), the almost total oblivion into which phrenology had fallen in Germany, and the causes of it, have been noticed in this Journal. At the present time, not only is there a reflex influence from France, England, and America, operating in favour of the science on the German mind, but the social condition of the country itself is more favourable to its reception and cultivation, than at any period since phrenology was discovered. Education is now extensively spread among the people; industry is prosperous; commerce is active; political excitement is extinguished; theological discussion has nearly worn itself out; the metaphysical philosophies of the old German school have been found, like our own metaphysical systems, to be inapplicable to practical purposes; added to all which, there is an increasing freedom of action, of speech, and of publication, in many of the German states. The natural effect of these circumstances is a relish for the rational and useful, and a growing dissatisfaction with the vague, although profound (we had almost said incomprehensible), speculations, which have hitherto been the food of the higher minds in Germany. Mr Noel has here presented a view of phrenology, well calculated to command attention, and suited to the present state of the public taste.

In his first lecture he enters largely into the principles, in physiology and mental philosophy, on which phrenology is

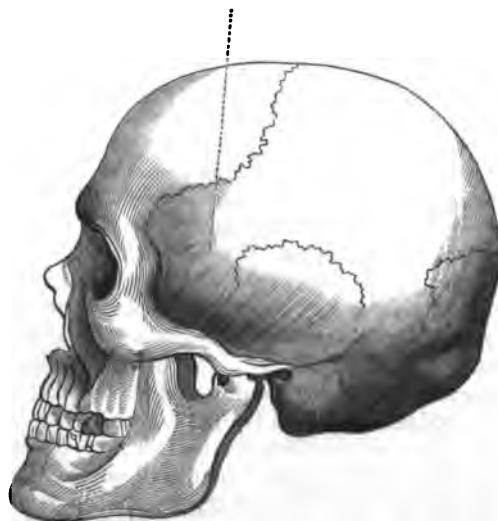
founded ; and he has translated and incorporated with it a large portion of the article on the merits of the science which appeared in No. 18 of the *British and Foreign Medical Review*. He has drawn illustrations of the particular organs from the works of Gall, Vimont, Broussais, and Combe, and added many valuable observations of his own. He acknowledges his obligations to Dr Seiler of Dresden, and Count Francis Thun of Prague, for the use of their valuable collections, and to Dr Bernhard Cotta for his assistance in the publication of the work. When we reflect that Mr Noel is an English gentleman who has lived in Germany only for a few years, we are surprised and delighted by the success with which he has presented the subject to the German people. We acknowledge that we owe the invaluable gift itself to them ; we lament their error in having rejected and contemned it for so many years ; but we cannot doubt that the day has now arrived when they will claim it as a child of their own, and thank France, Britain, and America, for having received it when it was an outcast from home, reared it into a stately form, and presented it to them again in all the beauty and vigour of early youth, bearing the stamp of truth and power on every feature.

Mr Noel next treats of the organs in the order of Mr Combe's System, as far as No. 21, Imitation ; and announces that the second part of his Lectures is in the course of preparation. He dissents from the views of Combe and Vimont on Concentrativeness, denies Conscientiousness to be an original faculty, and doubts of the evidence in favour of Imitation. Concentrativeness is a disputed faculty, on which the most enlightened phrenologists differ in opinion, and Mr Noel's objections to it are ingenious ; but we cannot speak favourably of his attempt to account, by means of other faculties, for the peculiar emotion which is communicated to the mind by the organ of Conscientiousness. This appears to us to be the weak portion of his work. In regard to Imitation, he says : " In Vienna, Dresden, and wherever else I have had opportunities to observe the heads of good actors and mimics, I have never found a particular elevation in the region ascribed to this organ. On the other hand, I have remarked certain combinations of organs and other conditions which account for the talent." He distinguishes voluntary from involuntary imitation, and ascribes the latter to every cause which excites the same faculties into action in different individuals. If two Irishmen commence a row at a fair, in a few moments the whole mass of men will catch the infection, and begin to fight. This, however, is not the result of imitation, but is referrible to the law according to which the

faculties are excited to action by the presentment of their natural objects. Voluntary imitation he considers to arise from, *1st*, a lively constitution of brain, and a large development particularly of the organs which take cognizance of objects and facts; *2dly*, a large development of Secretiveness; *3dly*, a good development of the organs of the Feelings; and, *4thly*, a certain pliability of voice and body, and an active temperament. These gifts combined, says he, produce the talent for imitation.

As few phrenologists expressed doubts concerning this organ, we are led to conjecture that Mr Noel has not correctly estimated its size in the cases on which his opinions are founded. He says that, in distinguished mimics, he has "never found a particular elevation in the region in question" (*eine besondere Hervorragung in der beschriebenen region*); but it is well known that the true test of the development of Imitation is the height to which the head rises in this part above Causality; because, if Benevolence and Wonder be both large, it also may be largely developed, and yet no prominence or elevation appear. In such cases, however, these three organs will be found to rise high above Causality. The other qualities which he mentions certainly assist Imitation, but they do not produce it: indeed, we regard pliability of voice and person as one of its effects.

Among the lithographic illustrations which Mr Noel has presented is a view of the skull of Schiller, which is new to us,



and which we copy. The original is preserved at Weimar. Our readers will at once recognise its beautiful proportions.

We express our best wishes for Mr Noel's success, and encourage him to persevere. He has chosen a noble field of usefulness, and we cannot doubt that his lectures will be favourably estimated, and received in a kind spirit, by the intelligent and upright people to whom they are addressed.

In Austria, however, his work will have little effect; for there, at the instigation of the heads of the medical faculty at Prague, its circulation has been prohibited by the Government!*

II. *The Life of Beethoven.* Edited by MOSCHELES, from the German of SCHINDLER. London, 1841.

We have lately looked through this rambling and ill-digested work, and have been so much struck by the numerous traits of singularity which it presents in the genius, dispositions, and conduct of the great composer, that we cannot sufficiently regret the non-existence of any authentic cast of his head, or of any complete and trustworthy account of the development of his brain. The description given by his biographer of the appearances of the skull and brain as observed after death, serves only to whet curiosity by shewing how interesting a more detailed and accurate account would have been. Had Beethoven lived to fulfil his cherished intention of visiting England, we venture to affirm that no such blank would have been left in his history. Our indefatigable friend Mr Deville would have spared neither trouble nor expense to add a cast of the head of the great Maestro to his already magnificent collection.

Ludvig von Beethoven was born at Bonn on 17th December 1770, of somewhat musical progenitors. His father was tenor-singer in the electoral chapel. His grandfather was a "music-director and bass singer, and performed operas of his own composition." Beethoven's education was indifferent. He learnt music at home, and "was closely kept to it by his father, whose way of life was, however, not the most regular. The lively and stubborn boy had a great dislike to sitting still, so that it was continually necessary to drive him in good earnest

* We observe by Mr Noel's quotations, that a German translation of Dr Gall's 8vo work was published at Nürnberg in 1833, under the title of "Vollständige Geisteskunde," &c., of which we were not previously aware; as also that, in 1838, Dr Cotta had translated "Chenevix uber Geschichtche; und Wesen der Phrenologie."

to the pianoforte. He had still less inclination for the violin." He had afterwards a better instructor than his father. At the age of fifteen he was appointed organist to the electoral chapel, and his extraordinary talent began to be recognised by good judges; and from this time his fame went on increasing in proportion as his works became known.

In person, Beethoven is described as compact, strong, and muscular. His height scarcely exceeded five feet four inches Vienna measure. "His head, which was unusually large, was covered with long bushy grey hair, which, being always in a state of disorder, gave a certain wildness to his appearance. This wildness was not a little heightened when he suffered his beard to grow to a great length, as he frequently did. His forehead was high and expanded, and he had small brown eyes, which, when he laughed, seemed to be nearly sunk in his head; but on the other hand they were suddenly distended to an unusually large size when one of his musical ideas took possession of his mind. On such occasions he would look upwards, his eyes rolling and flashing brightly, or straightforward with his eyeballs fixed and motionless. His whole personal appearance then underwent a sudden and striking change. There was an air of inspiration and dignity in his aspect, and his diminutive figure seemed to tower to the gigantic proportions of his mind. These fits of sudden inspiration frequently came upon Beethoven when he was in company, and even when he was on the street, where he naturally excited the marked attention of every passer by. Every thought that arose in his mind was expressed in his animated countenance. He never gesticulated either with his head or his hands, except when he was standing before the orchestra. His mouth was well formed; his under lip (at least in his younger years) protruded a little, and his nose was rather broad. His smile diffused an exceedingly amiable and animated expression over his countenance, which, when he was in conversation with strangers, had a peculiarly pleasing and encouraging effect. But though his smile was agreeable, his laugh was otherwise. It was too loud, and distorted his intelligent and strongly marked features. When he laughed, his large head seemed to grow larger, his face became broader, and he might not inaptly have been likened to a grinning ape; but fortunately his fits of laughter were of very transient duration."

In the portrait prefixed to the work, which is said to be a correct likeness, Beethoven certainly presents an appearance of wildness and disorder, almost sufficient to justify the suspicion of insanity which was so often excited by his conduct, and by the singular laugh and gestures above described. The

peculiar but indescribable expression presented by the portrait is so very rarely seen except in insanity, that, when looking upon it, we could almost imagine we had before our eyes a graphic illustration borrowed from the works of Pinel or Morison, and not the image of a man of sound mind. Beethoven's well-known deafness necessarily incapacitated him from ever being a good performer, and rendered his case very favourable for investigating the qualities essential to musical genius as distinguished from mere artistical skill in playing, with which, however, it is often confounded. Beethoven's deafness would have presented an almost insuperable obstacle to the acquisition of great mechanical dexterity; but, in addition to this, he seems to have been naturally deficient in Constructiveness, and the other faculties on which neat-handedness and skill in playing depend. Even before he lost his hearing, at the age of about twenty-eight, his manner of playing on the piano is described as having been "hard and heavy," which he himself ascribed to practising much on the organ. But that it was at least partly owing to the cause we have assigned, is shewn by various other manifestations. His pupil Ries tells us, for example, that he was "most awkward and helpless, and his every movement completely void of grace. He seldom laid his hand upon any thing without breaking it; thus he several times emptied the contents of the inkstand into the neighbouring piano. No one piece of furniture was safe with him, and least of all a costly one; he used either to upset, stain, or destroy it. How he ever managed to learn the art of shaving himself still remains a riddle, leaving the frequent cuts visible in his face quite out of the question. He never *could* learn to *dance* in time." The readers of this Journal will at once recognise these as clear indications of deficiency in the constructive and knowing organs, on which mechanical skill depends.

Of the intense activity of Beethoven's Destructiveness and Self-Esteem many curious and painful traits are given; but in the following, the ludicrous certainly preponderates, even while we cannot but reprobate the temper which gave way to such unseemly ebullitions of rage. "Beethoven was at times exceedingly passionate. One day when I dined with him at the Swan, the waiter brought him a wrong dish. Beethoven had no sooner uttered a few words of reproof (to which the other retorted in no very polite manner), than he took the dish, amply filled with the gravy of the stewed beef it contained, and threw it at the waiter's head. Those who know the dexterity of Viennese waiters in carrying at one and the same time numberless plates full of different viands, will con-

ceive the distress of the poor man, who could not move his arms, while the gravy trickled down his face. Both he and Beethoven swore and shouted, whilst all the parties assembled roared with laughter. At last Beethoven himself joined the chorus, on looking at the waiter, who was licking in with his tongue the stream of gravy which, much as he fought against it, hindered him from uttering any more invectives; the evolutions of his tongue causing the most absurd grimaces." (Vol. ii. p. 307).

Of a similar description were his frequent scenes with his cook, whom he used to summon to his presence "with tremendous ejaculations" when there happened to be even one stale egg among ten, which she brought to him at one time to be made into soup by himself. The cook, "well knowing what might occur, took care to stand cautiously on the threshold of the door, prepared to make a precipitate retreat; but the moment she made her appearance, the attack commenced, and the broken eggs, like bombs from well-directed batteries, flew about her ears, their yellow and white contents covering her with their viscous streams." (Vol. ii. p. 310.)

Beethoven early gave indications of a most energetic Self-esteem, in the very high estimate which he formed of his own powers, and in his marked disinclination to perform any even the most trifling act which could be made to imply an acknowledgment of his own inferiority. From this feeling, more than from rational conviction, he seems to have been throughout life a fierce republican in spirit. On one occasion, at Toeplitz, in 1812, his Self-esteem went so far as to lead him to set at ludicrous defiance the whole imperial family, on meeting them on the public walk. Instead of standing aside respectfully as all other men did, till they should pass, Beethoven tells us with great gravity, that "*I pressed my hat down on my head, buttoned up my greatcoat, and walked with folded arms through the thickest of the throng, princes and pages formed a line, the Archduke Rudolph took off his hat, and the Empress made the first salutation. Those gentry knew me.*" Goethe, who was with him, shrunk back from this rude display of insult and impertinence, which the royal family responded to with a politeness and good humour which ought to have made Beethoven ashamed of himself. So far, however, from this being the case, he, still glorying in his own conceit, "gave Goethe no quarter," but "*rallied him smartly for his deference.*"

Self-willed, eccentric, and obstinate from his youth, his repulsive qualities were strengthened by the excessive indulgence in every whim which he met with from his aristocratic

patrons on first going to Vienna. Professing utter indifference for rank and wealth, he too often acted as if true independence could be shewn only by rudeness and boorish contradiction; and yet it is remarkable that, with all his professed contempt for such distinctions, "the objects of Beethoven's attachment were always of the higher rank;" and after receiving a gold snuff-box from the King of Prussia, he used to boast, "with much complacency, that it was no common box, but such as is usually given to ambassadors." On another occasion, when a supper was given to Prince Ferdinand by the old Countess — at Vienna, a table being laid for *the Prince and the highest nobility alone*, but "no cover for Beethoven, he took fire, uttered some coarse expressions, took his hat, and left the house." A few days afterwards, Prince Louis gave a dinner, and placed Beethoven on one side, and the Countess on the other—"a distinction," says his biographer, "which he always talked of with great pleasure;" and yet he held rank in contempt!

Beethoven's self-confidence led him to despise the opinions of those who differed from him, and to treat the acknowledged principles even of his own art with no small contempt when he happened to contravene them. On his first arrival in Vienna, he is stated to "have composed away without concerning himself about the indispensable scholastic rules," although "he knew nothing of counterpart, and very little of the theory of harmony." At last, however, he was induced to receive instruction from Haydn, but soon quarrelled with him.

Beethoven also received instructions in Vienna from Mozart, Albrechtsbeger, and Salieri. They all agreed in their regard for him, but "each said Beethoven had always been so obstinate and self-willed, that his own hard-earned experience often had to teach him those things the study of which he would not hear of." Even during his last illness, the same selfish features of his character predominate. "His caprice, or rather obstinacy, is excessive," says Schindler, "just as ever, and this falls particularly hard upon me, since he wishes to have absolutely nobody about him but myself. And what remained for me to do in this, but to give up my teaching and my whole business, in order to devote all my time to him? *Every thing he eats or drinks I must taste first, to ascertain whether it might not be injurious for him.* However willingly I do all this, yet this state of things lasts too long for a poor devil like myself." It would be difficult to produce a more marked example of ill-regulated activity of the selfish faculties than this, especially when taken in connection with the almost

stern doggedness with which Beethoven at all times insisted on the gratification of his own feelings, no matter at what expense to those of others.

Beethoven's most distressing deafness was a great barrier to the cultivation of friendship with those around him. But the sentiment of attachment was not by any means strongly shewn even before that affliction came upon him; and if it had been naturally vigorous, it would have proved a source of much future consolation to him. His biographer, however, considers him as an attached friend, and yet admits, that "it was frequently the case that for years he knew nothing about intimate (?) friends and acquaintances, though they, like himself, resided within the walls of the great capital; *if they did not occasionally give him a call, they were as good as dead.*" Surely it is a strange sort of intimacy that could live for years within hourly reach of friends, and yet never seek their society! But in truth, Beethoven was most capricious in the treatment of his friends, and did not scruple at any time, and on the most frivolous pretences, to accuse them of cheating and deceiving him, and of being void of every sentiment of honour. The first paltry being that chose to malign them to him, was sure to find him the ready and unhesitating recipient of calumny. His distrust and suspicion, indeed, were so habitual and excessive, as scarcely to find their parallel except within the walls of an asylum; and the more one is made acquainted with his eccentricities and feelings, the conviction becomes the stronger, that they were not the manifestations of a soundly constituted mind, but the painful symptoms of a disease which at last proceeded so far, as scarcely to leave him responsible for his actions.

In accordance with this view, which is the kindest as well as apparently the most just which can be taken of Beethoven's peculiarities, we find that, before his thirtieth year, he was already suffering under a hardness of hearing, which soon ended in total deafness, aggravated all his eccentricities, and "rendered him inexpressibly miserable." We cannot, indeed, conceive a more severe or trying affliction than deafness must have been to a man of Beethoven's sensibility and extraordinary musical genius, and most deeply was such a man in such a situation entitled to be sympathized with. His own description of his privation, for which we have not room, is most touching. "It brought me," he says, "to the brink of despair, and had well nigh made me put an end to my life; nothing but my art held my hand." By utterly secluding him from society, and shutting up every natural vent to his feelings, as well as by the misery it inflicted upon him in the world of music, his deafness gradually gave a morbid irritability to his whole mind,

which his fits of inspiration alone could soothe, and which became more and more remarkable the longer he lived.

Beethoven's biographer repels with indignation the suspicion entertained by many, that he was not in his sound mind during the latter years of his life. In this we differ entirely from the author; and his own pages seem to us to afford conclusive evidence that Beethoven laboured under nervous disease for many years. He was not, it is true, *raving* mad, or in a state requiring confinement or coercion. There are many forms of mental aberration dependent on undoubted organic disease, which do not shew themselves in violence or in general absurdity, and which can be recognised as morbid only by close and discriminating observers. Such we conceive to have been the case with Beethoven; and we consider our opinion warranted not only by the indications during life, but by the appearances found on dissection after death, of which the following account is given by his biographer:—

“ Since it would not be uninteresting to many admirers of Beethoven to learn the conformation of his skull, and the state in which the organs of hearing were found, I insert the following particulars from the report made after the dissection of the body by Dr Johann Wagner. ‘ The auditory nerves were shrivelled and marrowless, the arteries running along them stretched, as if over a crow-quill, and knotty. The left auditory nerve, which was much thinner than the other, ran with three very narrow greyish streaks; the right, with a thicker white one, out of the fourth cavity of the brain, which was in this part of a much firmer consistence, and more filled with blood than the rest. The convolutions of the brain, which was soft and watery, appeared twice as deep as usual, and much more numerous. The skull was throughout very compact, and about half an inch thick.’ ”

In the compactness and thickness of the skull, the medical reader will recognise one of the most frequent results of long-standing disease in the head; and that the brain participated in the disorder, is farther shewn by its softness, and the water effused over it. The state of the nerves of hearing is extremely interesting, taken in connexion with his deafness, and affords a striking refutation of the not uncommon theory which refers musical talent to the possession of a fine ear.

III. *The Theory of Taste founded on Association, tested by an Appeal to Facts.* By Sir GEORGE STEUART MACKENZIE, Bart., F.R.S.S.L. & E., F.S.S.A., &c. Second Edition.—Edinburgh: Maclachlan, Stewart, & Co. London: Simpkin, Marshall, & Co. Pp. 200.

Having reviewed in a former volume (iii. 437) the first edition of this excellent work, we have now only to welcome it in its improved, neat, and much cheaper form. It is dedicated "To William and Robert Chambers, the enlightened and benevolent instructors of the people;" and this advertisement is prefixed to it: "The following Essay was first published in the year 1817; at a time when prejudice was so strong, that nothing was more disagreeable to the public than a call for investigation. Consequently it attracted scarcely any attention, but from those few candid and high-minded persons, who perceived the new light that had been shed on mental philosophy, and were able to appreciate its value. The author, in reality, published his Essay too soon; and even now he might feel that the proper time had not arrived, had it not been he was informed that some old speculations on Taste were preparing for republication, together with a defence of the Theory which he had undertaken to dispute. Believing that the world is not yet prepared with patience enough to investigate the Theory with which he would replace all former ones, the author has confined himself almost exclusively to a criticism of the Theory most recently promulgated, and apparently the most approved; leaving it to other hands to expound what "will in due time be universally acknowledged to be the true Theory of the Beautiful and Sublime."

IV. *A Few Words to Tradesmen and to the Public on the Desirableness and Practicability of abridging the Number of the Hours of Business.* By A. J. K.—London: J. F. Shaw. 1842. Pp. 24.

The author of this sensible publication gives utterance to views which for several years have evidently been coming into repute, and are even beginning to be reduced to practice. "It has long," says he, "been the conviction of the writer of these pages, that the position of tradesmen as a class, is far

less comfortable than it might be, and that their condition is susceptible of great amelioration without the least detriment to business ; the particular part of their lot which, as it seems to me, is at once disagreeable and unnecessary, is the length of attendance upon business,—shops being open generally for 13, 14, and even 15 hours a-day.”

He proceeds to shew, first, that a diminution of the number of hours devoted to business is highly desirable. The present system he assails as inimical to comfort, injurious to bodily and mental health, and opposed to the intention of the Creator as manifested in the constitution of man. Speaking of injury to the mind, he observes—

“ Man has an intellectual as well as an animal nature,—a soul not less than a body ; his happiness is most promoted by the wellbeing of each : and the pleasure arising from the cultivation of the mind, is at least equal in degree, and superior in character, to that which proceeds from the gratification of the animal nature. Is it nothing to employ time (that talent for which we must give an account) so that it may yield us pleasure in the present and satisfaction in the retrospect ? Any custom, then, or arrangement of society, which constrains such attention to the body as to endanger or obstruct the cultivation of the mind, is, I think, impolitic, inasmuch as it cuts off one of the most prolific and purest sources of human happiness. Such is the tendency of the system in question ; because by consuming in business the whole, or nearly the whole, of the time unoccupied in eating and in sleeping, it excludes, or at least much diminishes, the opportunity for mental culture.

“ This consideration increases in importance from the fact, that the subjects of this confinement are for the most part young men, whose particular period of life is a most important one ; it is the time when the hitherto pliable character begins to assume fixedness and stability, and when it is operated upon with great force by surrounding circumstances : the habits and character of mind now formed become fixed in the nature, identified with the man, and generally adhere to him throughout life. * * *

“ Again : Such is the reciprocal influence of body and mind, that when the body is weary the mind is disinclined for work ; so that even if studiously disposed, the exhaustion and weariness of body consequent on fourteen hours monotonous confinement would almost incapacitate one for anything but sleep. The system of late hours is objectionable, then, on the ground, that, in proportion to its degree, it *tends* to weaken and to sensualize the mind, to lead men to lay too much stress and

importance upon the acquisition of wealth, and to lose the pleasures derivable from the cultivation of the mind, and from the endowments with which man is blessed by God.

"I do not advocate any neglect of business. The body must be attended to, but the mind must not be neglected; proper attention to each is not incompatible, but highly conducive to the happiness of man.

" 'Not always fall of leaf, nor ever spring;
No endless night, nor yet eternal day;
Thus by succeeding turns God temp'reth all.'

"Let every duty be attended to, but let it be *every* duty; let not one encroach upon another; let not the joys of the domestic circle, the sweets of affection and of friendship, the pleasures of science and knowledge, nor the still higher pleasures of Christian duty, be sacrificed, or at all crippled and diminished, by a short-sighted covetousness, or by too ready a disposition to conform to every usage of society, and to follow the custom of the many, be it good or be it evil."

And a little farther on he says—"By observing the parts and analysis of a machine, we judge of the duties and functions it is intended to perform: thus, if we see a clock with a bell and hammer, as well as with weights and wheels, we imagine that the intention of the maker was, that it should not only keep time, but also that it should strike the hour; anything like tying up or restraining the striking apparatus, would be an impeachment of the judgment of the maker. Upon the same principle when we examine man, and find that he is endowed with thinking faculties, and with affections and feelings, which require for their development daily and habitual exercise, we conclude that the intention of the benevolent Creator was, that man should not employ his time and energies exclusively, or nearly so, in administering to the wants of the animal nature, but that he should also cultivate the mind, and partake of the enjoyment to be reaped from due attention to the whole man."

Having established the desirableness of a change, the author goes on to demonstrate its practicability. The business of a shop, he maintains, might be concentrated within a much shorter period; and, admitting that by keeping open till eleven a man may secure the chance custom of a few, he still doubts whether actual gain is the result of this; "for in society there are men of principle and observation,—there are many in whose estimation keeping open till late would be a stigma on the shop, and who would patronise a tradesman whose hours of business were comparatively moderate, in preference to another who kept open till late, even to their own

convenience. . . . It is evident, too, that all tradesmen are not of opinion that it is the wisest policy to act upon the principle of late hours. At the corner of St Martin's Court, St Martin's Lane, there is a clothier's shop, which has in different parts of the windows two or three copies of the following announcement : ' Being convinced of the inutility of keeping open shops until the very late hours practised by the trade in general, to the very great disadvantage of buyers, though they may not be aware of it, the proprietor of this establishment has determined upon closing his shop at eight, *hoping that it will meet with general approbation and increased patronage.*' Struck with the novelty of the thing, I went in and inquired what effect shutting at eight had upon their business. A young man, with ruddier cheeks and with a more cheerful countenance than is generally to be seen in other shops of the same trade, replied that their business was increased by it ; nor was that the only advantage, for that while in business they set to work with more spirit and cheerfulness than they otherwise should. I myself know of three persons who have purchased there, who, but for this closing at eight, would probably have never entered the shop."

The effect of the proposed change, the author rightly thinks, would be a great increase in the enjoyment of life. It would have an influence, "1st, Upon the body ; as there would then be opportunities for exercise, and for the enjoyment of air free from the poisonous influence of gas. 2d, Upon the mind ; as there would then be time for reading, for frequenting scientific institutions, &c., which present attractions to, and stimulate the exercise of the mind of those who would otherwise probably neglect it. Such institutions are ever ready to spring up where there is likelihood of success ; and if the bulk of the community, tradesmen, had their evenings to themselves, I have no doubt there would spring up a goodly number in town and country. The downfall of error and progress of truth would be accelerated by the more enlightened consideration of the people ; all schemes of charity, for ameliorating the physical or moral condition of our fellow-creatures, would be more likely to meet with the attention they deserve ; and as to the last, reflection and thought and the enjoyment of opportunities now quite out of reach of the majority of those engaged in trade, would, I think, be highly conducive to spiritual good, and to the promotion of true peace and happiness."

As to the means of bringing about this change, he supposes the difficulty to consist, not so much in persuading people that the evil is to be deplored, or is unnecessary, as in prevailing

on them individually to act. He submits the following rules to the acceptance of the reader: "1st, Never sell; 2d, Never buy, after that time at which you think business ought to be suspended; 3d, Endeavour to disseminate your opinions, and to induce others to do the same." These rules he enforces at some length; but as our space is exhausted, we must now conclude, recommending his modest tract to the attention and patronage of all who desire to increase the comfort and intelligence of that extensive and highly useful class,—the shopkeepers of Britain.

V. The British Medical Journals.

The Medico-Chirurgical Review, No. LXIX., contains (p. 66) an extract from Dendy's "Philosophy of Mystery" on the subject of the plurality of organs in the brain, a doctrine which that author seems to support. Next follows an analysis of Mr Combe's "Moral Philosophy," concerning which, and his "Notes on the United States," the reviewer observes, that "although these works may appear little calculated to embrace questions essentially, or even relatively, connected with the principles of medical philosophy, nevertheless, if candidly and considerably examined, his volumes will be found so full of natural and scientific truth, that the most experienced physician may derive from them a valuable and varied supply of excellent practical information." The reviewer selects for exposition the chapter on the preservation of bodily health considered as a moral duty. He quotes the treatise of Dr Caldwell on Physical Education, justly characterizing it as an "excellent, eloquent, and truly practical work," and its author as a "highly talented and zealous philanthropist."—Among some extracts given in a subsequent article, from "Rambles in Europe in 1839, by W. Gibson, M.D., Professor of Surgery in the University of Pennsylvania," we find the following sketch of Mr Lawrence: "I had not inquired about his personal appearance, and was, therefore, particularly struck, upon entering his study, with his fine, manly figure; his open, expressive, intelligent countenance; his large and well-proportioned head; his lofty and expanded forehead; his clear and brilliant complexion; his mild, but sparkling, grey eye: and then when he spoke in a tone so quiet, modest, and unassuming, with a manner so gentle and conciliating, and expressed himself so kindly and affectionately towards our country, its institutions and citizens, I could not but feel I stood in the presence of a superior being, could almost imagine I had known him all my

life, and warmed towards him insensibly, as if he had been an old, long-trying, and intimate friend."—The Report of Mr Farr on the Mortality of Lunatics is reviewed at p. 82.—From another article (p. 111) we learn, that in Shropshire the number of the insane, in proportion to the population, is twice as great as in Staffordshire, and the proportion of idiots almost 20 per cent. more; the same inferiority being observed, if we take a county partly mining and partly agricultural, as Northumberland; or one wholly agricultural, as Sussex. In counties where the proportion of the insane to the population is similar to that in Staffordshire, the proportion of idiots averages 11 per cent. less than there. Dr Ward, from whose paper on the Medical Topography of Shrewsbury, in the ninth volume of the Transactions of the Provincial Medical and Surgical Association, these facts are derived, remarks that the prevalence of idiocy may be taken in some degree as the measure of the intellectual degradation of a country, though, doubtless, climatorial influence, as in the Swiss canton of Valais, has considerable effect in the production of this form of insanity. Comparing Shropshire with the general average of England, and of England and Wales, "we find it inferior to both united, though superior to Wales alone, to which it thus rather closely approaches, not only in climate and soil, but also in intellectual character. It is worthy of remark, that the proportion of idiots is the highest in three of the most mountainous counties of Wales, viz., Caernarvon 68.4, Denbigh 75.8, and Merioneth 82. Having thus exhibited the dark side of the picture, it is but right to take a more favourable view, and to state that there are few counties in the kingdom that can boast of a longer list of worthies in the sciences, arts, or arms, than Shropshire."—The only other article in this No. of the Review to which it seems necessary here to direct attention, is one (p. 155) containing extracts from "Observations on the Management of Madhouses, by Caleb Crowther, M.D., formerly senior physician to the West-Riding Pauper Lunatic Asylum." In the passages quoted, the Doctor recommends that in every asylum there should be a well regulated series and system of manuscript books, containing the history and treatment of the patients; discusses the causes which prevent the ready detection of abuses; and makes some observations on Haslar Hospital, St Luke's, Bethlem, and Hanwell. As to the personal coercion of lunatics, he says—"Whether the entire abolition of all instruments of restraint will prove advantageous and practicable, I have not had sufficient experience to determine; but of this I am certain, that the public is greatly indebted to Dr Conolly for making the experiment on a large

scale." The opinion is expressed by the reviewer, that "Dr Crowther, though he does seem rather too wroth, is calculated to do a great deal of good."

The first article of No. LXX. is a review of Dr Marshall Hall's work "On the Diseases and Derangements of the Nervous System." The critic doubts whether Dr H. is well advised in dwelling so much on the injuries he has received, and thinks him inclined to overrate their magnitude. "New views," he justly remarks, "are at first ill understood, and require opposition for their perfect development. Men's minds are too entrenched in old opinions to be taken by storm, even by truth. The process of conviction is a slow and sure one. All this a philosopher should reckon on, and not lose his temper at every doubt and every objection." The following is a portion of the account given of Dr Hall's views:—

"The cerebral system being the system of the sensations, of judgment, of volition, it is to it that we must refer all morbid conditions of these mental acts or functions. Every derangement of the senses, every form of delirium or of coma, or of perverted imagination or judgment, every *act* of violence, must be referred to the condition, primary or secondary, of the cerebrum, or cerebellum. The experiments of Magendie and Flourens have shewn that it is impossible, by lacerations or other modes of injury of the *cerebrum* or *cerebellum*, to induce either pain or contraction in the muscular system. These organs are not endued with *sensibility*, or with the *vis nervosa* of Haller.

"When the cerebrum is irritated, delirium ensues. When compressed, coma is induced. When lacerated, we have paralysis of *voluntary* motion. If other phenomena are seen in diseases of the encephalon, they arise from the extension of the influence of these to the true spinal and ganglionic systems, through *irritation* or *pressure*, *counter-irritation*, or *counter-pressure*.

"The olfactory, the optic, the acoustic nerves are, equally with the cerebrum and cerebellum, incapable of *pain*, or of *exciting movements* in the muscular system, when punctured or lacerated. But when the optic nerve is inflamed or irritated, there is impatience of light; when the membranes of the encephalon are inflamed and the cerebrum irritated, there is delirium. When these several textures are compressed, there is amaurosis, and coma respectively.

"It must not be lost sight of, that, not only undue arterial action, and venous congestion, induce morbid states of the cerebral functions, but the state of exhaustion from the loss of blood, the anæmious condition in chlorosis, &c. induce *similar*

effects, and present to the physician anxious cases, which frequently try his skill in diagnosis. Too great action, then, of the minute arteries, congestion in the veins, an anæmious state of the vascular system of the encephalon, alike induce morbidly exalted and impaired conditions of the mental and cerebral functions: spectra, delirium, insomnia; amaurosis, stupor, coma; violent voluntary actions, or paralysis of the voluntary motions: these are the symptoms which arise out of these morbid conditions of the cerebral system and functions; and these only. Spasmodic actions depend upon the fact of another system being implicated."

As to the effects of disease of the cerebellum—

"Dr Hall is inclined to think that disease of the cerebellum induces its peculiar effects on the genital organs, by irritating the medulla oblongata. The effects observed in strangulation, in some cases of epilepsy, as well as in several experiments, induce him to suppose so.

"Vomiting sometimes occurs as a prominent symptom as in many other diseases of the encephalon. This, as well, as the affections of the genital organs, is obviously a result of irritation of the medulla.

"Convulsions are more frequent in diseases of the cerebellum than paralysis. They affect many parts, and resemble epilepsy; or only one part. There can be little doubt that it is the adjacent medulla oblongata which is really irritated so as to produce these phenomena.

"In some instances there has been a loss of balance, such as occurs in intoxication.

"Sometimes the sensibility has been affected,—exalted or impaired. In some cases there has been amaurosis.

"Diseases of the cerebellum, when they induce paralysis, usually affect the opposite side of the body, and the inferior more than the superior extremities."

In the second article is reviewed the valuable and elaborate work of Dr Maximilian Jacobi, "On the Construction and Management of Hospitals for the Insane; with a particular Notice of the Institution at Siegburg. Translated by John Kitching; with Introductory Observations, &c., by Samuel Tuke." Mr Tuke agrees with Dr Jacobi in thinking, that, even in an economical point of view, no lunatic asylum should contain more than 200 patients; a comparison of the cost of management in public schools of various sizes, having long led him to doubt whether an establishment of any description, for 300 persons or any larger number, will be managed so economically as one containing from 50 to 150 would be likely to be. The weekly cost of patients, it appears, is lower

in the small county establishment of Cheshire than in that of Lancashire, in Norfolk than in Middlesex, and in Suffolk than in the West Riding of Yorkshire ; and it is suggested as an additional benefit likely to flow from the establishment of more numerous hospitals for the insane, that a knowledge of the treatment of the disease would thus be more widely diffused. In Mr Tuke's opinion, there should be attached to each a plurality of officers, who, though not equal in authority, should be united in the consideration of the plan of treatment. He points out, as the greatest desideratum of our present institutions, an increased supply of persons qualified for the delicate office of administering to disordered minds. " It is," he remarks, " the character of the persons engaged, more than the change of system or the increase of the number of officers, which will effectually raise the condition of our asylums." Among the qualifications of an officer for moral management, he conceives that " a ready sympathy with man, and a habit of conscientious control of the selfish feelings and the passions," ought ever to be sought for as carefully as medical skill. " If a moral manager and religious instructor be chosen, he should be one who knows experimentally the religion of the heart, who can condescend to the weak and the ignorant, and who, in the best sense of the phrase, can become all things to all men. I have observed that the most successful managers of the insane have been those who were most humble and unselfish ; and it is only persons of this class who will ever effectually supply their intellectual and religious wants. A person of an opposite description, however talented, or however conversant with the philosophy of the mind, or the doctrines of religion, can never exercise efficiently this divine art of healing." Mr Tuke thinks that, under fair management, personal restraint of the patients is unnecessary in more than five out of a hundred cases ; but he does not seem inclined to dispense with it altogether. Data are noticed, from which it may be inferred with some probability, that insanity prevails in England and Wales in the proportion of at least 1 in 500 of its inhabitants. It is estimated that, in Norway, the proportion is 1 to 500 ; in the Prussian Rhenish provinces, 1 to 600 ; in France, 1 to 1000 ; and in Italy, 1 to 3785 ; but the data on which these estimates have been founded are exceedingly imperfect. Mr Tuke recommends a generous diet for the insane, and feels confident that acting upon this opinion has been one cause of the very small mortality in the institution over which he presides. The experience of Dr Wake at the York Asylum is referred to as confirmatory of this belief.

In an article at p. 353 on Mr Combe's "Notes on the United States," are selected from that work a variety of passages relating to subjects with which medical men are more immediately concerned; such as moral insanity, lunatic asylums, penitentiaries, physical education, ventilation, and cases illustrative of the physiology and pathology of the brain. In noticing the subject of insanity, the reviewer introduces the following sound remarks:—"Dr Conolly, in his instructive Report on the Hanwell Lunatic Asylum for 1840, observes, that 'the principles of changing all the circumstances surrounding a lunatic, is evidently one capable of application in certain cases, and in certain periods of the malady, with singularly felicitous effects.' We have always regarded this as a fundamental principle in the management of insanity, and we could instance, within the range of our own observation, the fatal results which have been occasioned by ignorance or wilful defiance of this most essential principle. In the deeply affecting and deceptive forms of transitory monomania which are so prone to arise in delicate and excitable females during pregnancy or convalescence after child-birth, no resource can be more preposterous and pernicious than that of secluding the patient in the bosom of her family, surrounded by rueful relatives, and attended by woe-begone familiars. Such a resource is known to have been adopted; and, from experience, it is also known to be most effectual in depriving the patient of every chance of recovery."

At page 489 is a notice of "An Inquiry concerning the Diseases and Functions of the Brain, the Spinal Cord, and the Nerves, by Amariah Brigham, M.D.; New York, 1840." The following is Dr B.'s summary of the result of pathological investigations into the functions of the brain:—"1st, That the cerebral lobes, or hemispheres of the cerebrum, are the seat of intelligence. 2^d, That the cineritious portion of these lobes, probably, is the seat of the mental faculties. 3^d, That the fibrous or medullary portions of the brain are connected with the motive powers, and transmit volition and sensation. 4th, That the lobes of the cerebellum are not connected with the manifestations of the mental powers, but are with the motive; and appear also to be with the sexual propensity, and that the sympathy between them and the stomach is intimate. 5th, That all the faculties of the mind may be manifested by one hemisphere of the brain. 6th, That the different parts of the brain have different functions, and that the anterior portion of the cerebral lobes plays the most important part in manifesting the mental powers, and appears to be the seat of the memory of words, events, and numbers. 7th, That the stri-

ated bodies and the thalami are intimately associated with the motive powers of the extremities. 8th, That parts in the middle and at the base of the brain, such as the fornix, corpus callosum, septum lucidum, pituitary body, and pineal gland, are not connected with the mental faculties." Some interesting extracts are given from Dr B.'s volume, concerning the influence of attention on the bodily organs, and of the mind in causing and curing diseases. The latter subject is more fully treated of in an essay on Moral Therapeutics, by M. Reveillé-Parise, of which a very instructive abstract is given at p. 511 of the same Number of the Review. The essay itself is published in the *Bulletin de Therapeutique*.

No. LXXI. contains (p. 280) a communication from Dr D. Jamison of Newtownards, entitled, "Deficiency in Size and Disease of the Cerebellum, the causes of Anaphrodisia." Dr Jamison's experience has led him to certain specified conclusions "confirmatory of some of the doctrines of phrenology;" but as they are calculated only for the pages of a medical publication, we cannot do more than refer to them. We content ourselves also with merely mentioning a review (p. 168) of Mr Joseph Swan's "Illustrations of the Comparative Anatomy of the Nervous System," and some remarks (p. 281) on the penal treatment of insanity and suicide suggested by a writer in the Medical Gazette. The following sentences are extracted from a notice (p. 165) of Dr Bennett's work "On the Employment of the Microscope in Medical Studies:—

"Pathology is divided, and usefully divided, into disorders of function and diseases of structure. The latter are, no doubt, the *consequences* of the former. As long as an organ shews no change in its material substance, when examined by the naked eye, we call its affections functional; but when visible or tangible alterations take place, we pronounce the complaint structural or organic—and too often beyond the remedial agency of our art.

"It is highly probable, however, that the slightest *functional* disorder of certain organs and tissues, as the brain, the mucous membranes, &c. are attended, perhaps caused, by some minute changes in the organs themselves, not discoverable by the naked eye. If the microscope could be employed in such cases, it might throw some light on the subject. But how is it to be applied? Functional disorders are rarely fatal; and it can only be where death takes place from some other disease, that the functionally disturbed organ can be subjected to the microscope."

The British and Foreign Medical Review, No. XXIV., is al-

most destitute of papers claiming notice in this place. Dr Brigham's work on the Brain is favourably reviewed; and there is a short but interesting notice of a work by Professor Fred. Holst of Christiania, "On the Influence of the Systems recently adopted in various Prisons upon the Health of their Inmates." Some observations are there made on the effect of the silent and solitary systems in the production of insanity.

In No. XXV., the reviewer of Dr Carpenter's "Principles of Physiology" mentions the belief of that writer, that acquired peculiarities, under certain limitations, may reappear in the offspring; and quotes his statement, that "no one who has sufficient opportunity of observation, can doubt that the intellectual faculties which have been developed by cultivation, are generally transmitted to the offspring in an improved state; so that the descendants of a line of educated ancestors will probably have a much higher capacity for instruction than the child that springs from an illiterate race." "This doctrine," adds the reviewer, "which many recent observations, particularly those of Mr Knight, strongly corroborate, is one to which a benevolent and liberal mind naturally leans: we both hope and believe in its soundness." (P. 167.)—Jacobi's work on Hospitals for the Insane is favourably noticed at p. 213; the reviewer's commendation being extended to the introductory observations of Mr Tuke, "to whom," says he, "science and humanity must ever remain deeply indebted for being the first in this country to open the way to that mild and just treatment of the insane, which has been so gloriously consummated by Dr Conolly." "This system," he adds, "has been now two complete years in operation; and every succeeding month has furnished fresh illustrations of its superiority. And when the great extent of the establishment at Hanwell is considered, and the perfect publicity of all the doings within its walls, it is impossible not to accord to the results of the experience afforded by it a degree of importance not easily over-rated. It appears from the magistrates' report that the total number of patients in the asylum on 30th September 1840, was 858, and on 30th September 1841, 918; the daily average number throughout the year being 883, and during the last quarter 915. And of this number not an individual has been in personal restraint during the last two years." The greater part of Dr Conolly's highly interesting "Third Report of the Resident Physician of the County Asylum at Hanwell," Oct. 1841, is reprinted at p. 274; comprising all that relates to bodily restraint, seclusion, general treatment, and religious services.

A paper "On the Pseudo-morbid Appearances of the Brain and its Envelopes," by Dr Robert Paterson of Leith, published in the *Edinburgh Medical and Surgical Journal* for January 1842 (p. 107), is worthy of attention in relation to the pathological aspect of phrenology. "These changes," says he, "present themselves under the forms of colorations and softening—appearances with which, as arising from disease, every medical man is familiar, but which sometimes are noticed, and bearing a very marked character, when few or no symptoms have existed during the life of the patient, to give rise to the suspicion that such a state of matters would be found after death. In such cases we shall find a ready explanation of the phenomena in pseudo-morbid changes." The causes of these which Dr Paterson enumerates are four:—*1st*, obstruction in the course of the venous circulation occurring shortly before death; *2dly*, gravitation of the blood to the more dependent parts; *3dly*, extravasal transudation and imbibition of the blood, or of some of its components, after death; and, *4thly*, spasmodic action of the muscular system (in children while the fontanelles are open), occurring towards the close of life.

The same Journal for April 1842 contains (p. 369) an article "On the Function of the Spinal Cord in cold-blooded Animals, in reference to Sensation and Voluntary Motion remaining after removal of the Cerebrum, &c. By George Paton, M.D." From various experiments on frogs made by Dr Paton, it appears that after removal of the cerebrum, and even after decapitation, cold-blooded animals manifest distinct voluntary motion dependent on sensation.—At p. 510 is a notice of Dr Bergmann's investigations "On the Structure of the white and grey Matters of the Brain, Cerebellum, and Spinal Marrow," published in the *Archives Générales de Médecine* for August 1841. After submitting to examination the matter of the brain and spinal marrow consolidated by means of alcohol, Dr Bergmann has arrived at the result, that both are composed of numerous lamellæ, closely applied to one another, forming different circumvolutions, yet never confounding with each other. These lamellæ appeared to be formed of the white medullary substance, their outer extremities being enveloped by the grey matter. Dr Bergmann concludes from this, that the brain is an electric centre, communicating by means of the nerves with all parts of the body. Nervous influence he therefore regards as analogous to electricity, if not identical with it. It is added, however, that Professor Bischoff of Heidelberg (Müller's Archives, 1841, p. 20), has made numerous experiments on the nerves, from which it ap-

pears that the most delicate instruments cannot detect electrical currents in them; and that they are very bad conductors of electricity, but have a very great sensibility for that agent—a circumstance which, according to Müller, renders them the best possible electrometers.

The *Lancet* has recently been the arena of a warm and protracted controversy between Dr Robert Dick of London, and several English phrenologists. Its origin was the publication in that periodical, on 5th and 12th February (pp. 637 and 672), of a paper read by Mr M. B. Sampson before the Phrenological Association last year, and entitled, "Phrenology in its Application to the Treatment of Criminals." Our readers have already been made acquainted with Mr Sampson's views, in an article which appeared in the 70th number of this Journal, p. 63, to which we refer. In the *Lancet* of 5th March, forth steps Dr Dick with "Remarks on some Statements in Mr Sampson's Papers," &c., which statements he characterizes as not less dangerous than paradoxical. "I apprehend," says he, "that a single argument which I shall bring to bear will, with persons accustomed to moral investigation and discussion, and to a study of the harmony and adaptation everywhere manifested in the intellectual constitution of man, furnish an irrefragable answer to Mr Sampson's statements, and an insurmountable objection to some of the most fundamental doctrines of phrenology. The general inference from Mr Sampson's statements and reasonings is, that a man's propensity to crime is wholly or in a great measure, so far as he himself is concerned, accidental and involuntary, and that he is no more responsible for the unfortunate tendency he may labour under to violence, excess, &c., than he is for a congenital bad habit of body, or for acquired disease in any organ. Now, the simple and conclusive answer to such gratuitous and dangerous theory as this is, that had nature, in any case, constituted a man so as that he was unavoidably, because physically, prone to crime, and so as that the strength of his volition was not equal, as a counterpoise, to that of his passions or propensities, she would, *at the same time* (all analogy leads us to conclude) have withheld from him the *consciousness* of crime, and the sentiments of self-praise and self-blame. There would most evidently be gross incongruity and gross injustice in making a man sensible of the distinctions of good and evil, and perfectly aware when he was forsaking the one and abandoning himself to the other; yet, at the same time, sending him into the world with a congenital disability (dependent on physical conformation) of preferring the good and eschewing the evil. In no other part

or arrangement of either the moral or physical creation do we observe any such monstrous and palpable inconsistency—any such manifest and notorious departure from harmonious adaptation. Now, as no person who has the slightest pretensions to candour or common sense will affirm that men, even the most criminal, ever lose their *consciousness* that they are acting criminally, that at least, lose this consciousness in anything like the same proportion in which they may commit crime,—and this consciousness being the test and measure of a man's possession of volition in regard to his actions, and therefore of his responsibility,—and as (according to my former argument) it would be obviously an injustice and incongruity repugnant to all our ideas of harmonious adaptation in nature and equity in the Deity, that men should be responsible, if constituted congenitally subject to the control of an original and physical necessity, it follows that Mr Sampson's theory is ill founded; and that the influence which, as assumed by phrenologists, the brain exerts over the mind, though possibly it may exist in *some* degree, yet does not exist to the extent, nor, probably, operate in the manner which they suppose. This argument, which I shall not here seek further to illustrate or apply, will, I apprehend, if properly managed, be found to be conclusive against the chief, and, at the same time, the most improbable and dangerous doctrines of phrenology. It very directly proves the folly of modifying our jurisprudence in conformity with phrenology, as proposed by the abettors of that system, since it would be the last degree of absurdity for the laws to absolve a man of crime *whose own internal feelings charged him not only with being criminal, but with being voluntarily so.*"

These and other objections of Dr Dick (to one of which, regarding the case of Miss Mapes, published in our fourteenth volume, p. 356, we mean to advert on a future occasion), are ably replied to by Mr Sampson on 19th March (p. 848), 23d April (p. 131), and 14th May (p. 251); by Mr J. G. Davey, one of the surgeons of the Hanwell Asylum, on 19th March (p. 850), and 30th April (p. 158); by Mr E. J. Hytche on 19th March (p. 852), and 21st May (p. 272); by Mr W. Miller of Islington, on 16th April (p. 108), and 14th May (p. 251); by a writer subscribing "Spectator," on 14th and 28th May (pp. 252 and 314); by Mr R. W. Heurtley of Kensington, on 14th May (p. 252), and 4th June (p. 349); and by Mr H. B. Brooks on 28th May (p. 315). Additional communications from Dr Dick are inserted on 19th March (p. 854), 2d April (p. 13), 7th May (p. 195), and 4th June (p. 349); and editorial remarks on the responsibility of criminals for their acts, the grounds of exemption, and the plea of insanity, appear on 11th June

(p. 375). In reviewing this controversy, it strikes us as curious, that no reference is made to the doctrine of Mr Sampson, that *all* criminals, whether sane or insane, free or necessary agents, *are responsible*, to the effect of being subjected to reformatory treatment, in itself sufficiently punitive to serve as a terror to those whom fear is capable of influencing. We are surprised, also, that the fact expressed by the classical saying, "*Video meliora proboque, deteriora sequor*," is so much overlooked by Dr Dick; and we freely renounce all "pretensions to candour and common sense," by expressing the deliberate belief, that criminals are often destitute of the consciousness that their conduct is wrong and culpable. Moreover, we are of opinion that Dr Dick shews great ignorance of the phenomena of insanity in asserting, "that so long as the *intellect* is sufficiently sound for all the ordinary purposes of life, the *moral* sense is always simultaneously sound to such a degree as to render the man responsible"—the word "responsible" being here used in its ordinary sense. It is strange to find a doctor of medicine maintaining, as he does, that individuals who, either from original defect or disease, lose their *moral* perception, lose, "let it be most carefully remarked, their *intellectual* perception simultaneously and in like degree." Mr Sampson, with reason, protests against the arrogant style in which Dr Dick has chosen to discuss a subject on which the most able and candid men may legitimately differ. Necessity is neither more nor less than necessity, whether causes be of a physical or moral character; and every one knows that the doctrine of necessity has been supported by many eminent and estimable philosophers and divines, who failed to discover in it that horrible and dangerous tendency which declaimers are fond of ascribing to it. We therefore concur with Mr Sampson in the opinion, "that a scientific journal should not be made the medium of charges against any one of 'artifice' and 'disingenuous reasoning,' coupled with the holding of views which are 'wild,' 'visionary,' 'shocking,' 'ludicrous,' and 'dreadful,' unless these charges are accompanied by something like demonstration."—Of phrenology Mr Davey says, "I am no less sure of the truth of what that gentleman doubts, than I am sure of my own existence at the moment I write, because I have practically tested it in the examination of the heads both of the sane and the insane. Let Dr Dick do as I have done, go to the large public prisons in and about the metropolis, and test the question at issue."

III. INTELLIGENCE, &c.

Lectures on Phrenology have lately been delivered at the following places:—

1. At *Birmingham*, in March, a course by Mr Rumball at the Philosophical Institution, Cannon Street; and another by Mr Wilson at the Theatre of the School of Medicine, Paradise Street, to the members of the Phrenological Society. The attendance at Mr Rumball's course is stated to have been respectable but not numerous; at Mr Wilson's, pretty good. At the conclusion of the latter course, Dr Birt Davis moved a vote of thanks to Mr Wilson in a very complimentary speech; the motion was seconded by Mr Levison, and carried with great applause. Mr Wilson subsequently delivered another course to the members of the Athenæum, having been engaged to do so by the managers of that institution. We understand that both he and Mr Rumball give sketches of the dispositions and talents of individuals for certain fees.

2. At *Bristol*, by Mr Jonathan Barber, in March and April. The following is extracted from the *Bristol Mercury* of 16th April:—"At the conclusion of Mr Barber's course of lectures on Phrenology at the Tailors' Hall, Broad Street, a series of resolutions were unanimously adopted by the meeting. The first and second consisted of votes of thanks 'to Mr Barber for his clear and eloquent exposition of the science,' and 'to Mr Bally, for the aid rendered by the application of his mode of measurement to the various heads and casts, and for his efforts generally to render the science demonstrable to the public.' The third, fourth, and fifth resolutions declared—'That Mr Barber's lectures had produced a deep impression of the truth of Phrenology; and of its great importance to self-discipline, in education, in criminal jurisprudence, and in giving confirmation to the sacred truths of morality and religion.'—'That in the opinion of the meeting he had fully redeemed his pledge to prove the possibility of applying phrenology to the discrimination of character, by having applied it with accuracy in numerous and incontestable instances among the citizens of Bristol.'—And 'That, with the thanks of the meeting already voted to Mr Barber, the mechanics desired to express their deep sense of obligation to him for the liberal terms by which this course had been made available to their special information, and for the evident earnestness with which he had sought to put them in full possession of the facts and principles of the science.' The meeting expressed a further hope that the deep interest taken in the course, and the large attendance upon it, would induce Mr Barber to extend a similar benefit to their brethren of the same class in other parts of the kingdom. A vote of thanks was also passed by acclamation to the chairman of the lectures, J. B. Clarke, Esq."

3. At *Cheltenham*, in April and May, a course of fifteen lectures by Richard Beamish, Esq. These are reported at considerable length in the *Cheltenham Free Press* and *Looker-on*. After the delivery of the concluding lecture on 13th May, a vote of thanks was, on the motion of Dr Conolly, seconded by T. Wright, Esq., voted by acclamation to Mr Beamish.

4. At *Chester-le-Street*, in the beginning of June, a course by Mr E. T. Craig, who has lately delivered another at *Richmond* in Yorkshire.

5. At *Dublin*, a course by Mr Wilson at the Mechanics' Institute, in May. We learn from a Dublin paper, that "the several meetings were numerous attended, and the most lively interest in the subject was manifested." (*The World*, June 4.)

6. At *Emsworth*, a lecture on the evening of 22d March, by Mr G. Miller, surgeon, the president of the Emsworth Literary Society. *The*

Hants Telegraph of 28th March, after stating that the lecture was very instructive, and delivered to a most respectable and crowded audience, adds:—"The study of the science is evidently advancing in this place and neighbourhood; popular prejudice is vanishing fast before free enquiry, which appears to be here, as well as in other places, greatly on the alert. Men begin to discover, that if Phrenology be consistent with fact, it must, in spite of all appearances, possess the advantage which characterizes all that is real, of being ultimately beneficial to man. A vote of thanks to the Lecturer was warmly adopted."

7. At *Heidelberg*, in May and June, a course by Mr George Combe, concerning which we have been obligingly favoured with the following communication by Mr Von Struve, a very intelligent lawyer of Mannheim, who, correctly estimating the importance of Phrenology, takes a warm interest in its diffusion in the land of its birth:—"To the *Editor of the Phrenological Journal of Edinburgh*.—Sir, Phrenology, long neglected Phrenology, has raised its head again in the country of Gall and Spurzheim. Not far from Tiefenbronn, the native town of the former, Mr George Combe, with the authority of the academical senate, and in a class-room (or Auditorium as it is called here), granted to him by the University, began his phrenological lectures at Heidelberg on the 11th of May, and has now delivered eight lectures. The most eminent men of the medical faculty, viz., Doctor Chelius, Professor of Clinical Surgery; Dr Naegele, Professor of Midwifery and Medical Jurisprudence; Dr Thomas Bischoff, Professor of Physiology; Mr Mittermaier, Professor of Criminal Law, known throughout Europe by his writings on Criminal Legislation; Professor Spengel, Rhetoric; Professor Jolly, Experimental Philosophy and Mechanics; Dr Roller, the Director of the Lunatic Asylum of the Grand Duchy of Baden, and several other distinguished persons, regularly attend them. Several gentlemen, of whose number I am one, came over from Mannheim by rail-road for the purpose. It is astonishing how Mr Combe has been able to make himself so much master of the German language as to be able to deliver his lectures in it. One of the professors paid him even the compliment, that he pronounced the German more distinctly than many German teachers. These lectures will convince, I hope, my countrymen, that as nature in general can be studied only by observation, so particularly also the nature of man; that we must not begin to study at a point which is quite above our capacities, but at a point which is fairly within our reach; and that the only means to ascertain the laws of our mind, such as it exists in its union with the body, is to observe the organ with which it works—the brain, and to compare it with the mental character of its owner. But our German philosophers, like the clergy of the middle ages, have hitherto been more inclined to quarrel about the nature of a thing which by their very quarrels they proved themselves not to know, than to study its nature by observation. Others set up systems of psychology, which were in fact nothing but descriptions of their individual characters, every one trying to prove to mankind that those qualities which he possessed eminently, or at least thought himself to possess, were the very essence and nature of the human mind. The result was, that there were taught as many different philosophies of mind as there were original teachers; that one system of psychology fell after another, as soon as it had lost the zest of novelty; and that the knowledge of the human mind made as little progress as the science of astronomy under the guidance of the astrologers, or the science of chemistry under the influence of the alchemists. The natural consequence of such a mistaken method was, that mental philosophy, as far as it was not founded upon observation, fell into great disrepute among the generality of men whose heads were not turned by the technicalities

of what calls itself science, although it is nothing but an unsuccessful attempt at it. So, I hope that the ancient school have themselves paved the way to Phrenology; and if they prove to have had at least this merit, we may pardon them for the rest of their doings. In Germany there is no animosity against Phrenology, such as seems to prevail among the greater part of the learned men, and men of standing in church and state in England and Scotland; but there is a total ignorance of the state which Phrenology has attained in Great Britain, France, and North America. Germany ought, therefore, to be very thankful to the generous endeavours of Mr G. Combe to bring back to them a light, which they did not know how to appreciate, although it shed its first rays among themselves, but which has been rekindled and become more and more brilliant in foreign countries, notwithstanding all the storms raised against it by bigotry, pedantry, and enthroned self-conceit. I trust he will not leave our country before he has seen Phrenology firmly established among ourselves. I am, Sir, your obedient servant, GUSTAV VON STRUVE, Advocate in the Supreme Court of the Grand Duchy of Baden.—*Mannheim, 3d June 1842.*" We have noticed at page 252 of this Number, Mr Noel's exertions in favour of Phrenology in Dresden, and hope that Germany will at last be roused to a sense of the importance of the new philosophy.

8. At London, the following lectures by Mr C. Donovan. (1.) An introductory lecture in April at the Western Literary Institution, Leicester Square, where Phrenology is specially studied by a class under his instruction; (2.) A lecture at the Russell Institution, Great Coram Street, in May; (3.) A course of six lectures, now being delivered, at the Clapham Literary Institution; and, (4.) A course of six at the Wandsworth Institution, also now going on.

Phrenology in Exeter.—The meetings of the Phrenological Society ended on 16th May; the days of meeting having been the third Monday in every month since October. I am sorry to say, that many of the members, who are not numerous, have shewed a supineness in their attendance, which does not augur well in favour of its continuation; there are not above twenty, and several of the most active either have left or are about to leave Exeter. At the first meeting in October, I proposed to admit ladies as members; this was put off, but they were admitted as visitors, and they have attended ever since; so that, though often but few members were present, there was always a good attendance of visitors of both sexes. One of the main objects of phrenologists is to extend the knowledge of the science, and it is only by bringing it forward before strangers that they can hope to do so. Last year I was instrumental in establishing a society, chiefly of young men, entitled "The Exeter Society for Advancement in Art, Science, and Literature." In connexion with it, I have opened a phrenological class; but not much has been done hitherto, on account of my having been obliged to interrupt it for some time; we are, however, going to resume it, and I may say that this society has been the means of making many acquainted with Phrenology.

F. DUVAL.

Exeter, 21st May 1842.

Mr Brindley's Anti-phrenological Lectures in London.—"An extraordinary scene took place on Friday se'nnight (May 27) at the Adelphi Theatre, Mr Brindley the Anti-Socialist having undertaken, in a public lecture, an attempt to controvert the principles of Phrenology. The lecturer contended that the skull of the criminal Good afforded a complete refutation of the hypothesis of Mr Combe, and other professors of the science. A cast of his skull, taken by the lecturer a few minutes after the execution, in the presence of Dr Elliotson and other medical gentle-

men, was produced, and phrenologists generally were invited to take part in the discussion, Mr Brindley reserving to himself the right of reply. The house was crowded. At a few minutes after eight, Mr Brindley appeared on the stage, and stated, that having been favoured with the cards of several gentlemen who expressed a wish to take part in the discussion, he should be happy to accommodate them with seats on the platform, if they preferred it. The offer was accepted, and the champions of phrenological science were ranged in a semi-circle round the lecturer. The lecture was then proceeded with, Mr Brindley confining himself chiefly to the skull of the culprit Good. The lecturer was once or twice interrupted by persons who disapproved of what he said; and Mr Mathews, who was stated to be foreman to Mr Deville, denied that he correctly described the cast of Good's skull, undertaking to produce a cast by Dr Elliotson. He left the Theatre for that purpose, and, on his return said, 'that Mr Brindley having, Quixote-like, created a phrenology of his own, had as readily destroyed it; and that if it could be proved to him that it was on the broad principle of benefiting science, and not the paltry subterfuge of pounds, shillings, and pence, that actuated the lecturer, he, for one, should be ready to cope with him.' The feeling of the majority of the audience, evidently with the lecturer, here burst out, and a scene of terrific confusion arose, in the midst of which a gentleman, whose name was stated to be Bushea, jumped on the stage, and advanced in an excited manner towards the lecturer, striking his hands violently on the table. Much alarm was occasioned by his proceedings, and the officers of the Theatre were requested to remove him. He resisted in every possible manner, and it was only by carrying him by the arms and legs off the stage that he was eventually got rid of. Order could not be again restored, and the meeting was virtually at an end; and Mr Brindley, having stated that he should be ready to defend his views at any time against the arguments of his opponents, left the stage."—*Globe*.

We are informed by a correspondent, who was present on this occasion, that Mr Brindley insisted principally on the want of parallelism of the tables of the skull, the inequality of thickness of the cineritious substance of the brain, and the fallacy of phrenological measurements; reviving Dr Stone's objections, which, he maintained, had never been refuted; and evidently assuming that phrenologists inferred the size of the organs mainly, if not entirely, from measurements by callipers. (On the subject of Dr Stone's objections, we refer to vol. vi. of this Journal, p. 1.) Mr Brindley's lecture lasted three hours. On 2d June, at eight o'clock, he delivered a second in the same place, having previously made the following announcement in the newspapers:—"Mr Brindley undertakes to demonstrate the utter fallacy of the phrenological hypothesis, and challenges Dr Elliotson, or any Phrenologist of established reputation, to point out on the brain the organs they have mapped out on the head. Mr Donovan has undertaken to give the characters impromptu of a number of individuals of known dispositions, who will accordingly be introduced to the meeting on Thursday evening." At the door of the Theatre, however, a person employed by Mr Donovan delivered bills to the persons entering it, to the effect, that "the statement of Mr Brindley, that Mr D. had pledged himself to examine heads before the audience, at the Adelphi Theatre, on this or any other evening, was untrue." At this meeting, which was thinly attended, Mr Brindley spoke for two hours; after which, "Dr Bushea" appeared (having been recognised in the gallery, and called for by the audience), and after apologising for his conduct on the former evening, wrote out his notions of the mental qualities of seven children whose written characters had previously been handed in; but, as we are informed, only two of his sketches proved to be correct. The meet-

ing broke up after twelve o'clock. At a third, held next evening, the Theatre was crowded, and Mr Brindley declaimed for three hours and a half on the infidel tendency of Mr Combe's "Constitution of Man." No one was allowed to speak in vindication of Phrenology. At the conclusion, which was about twelve o'clock, a vote of thanks was accorded to Mr Brindley, unanimously, with the exception of one gentleman.

As the newspaper reports, so far as we have seen them, give no intimation of the nature of Mr Brindley's objections, and he himself evinces no anxiety to publish them, we must of course leave him in apparent possession of the field. Judging, however, from the objections published by him some years ago, in a letter in a newspaper, we infer that their whole force must be derived from misrepresentations which can impose only on those who are ignorant of Phrenology.

"Dr Bushea," above mentioned, is the individual of whose doings at Sheffield some account was given in our last Number, p. 186. He has now, we learn, prefixed "the Reverend" to his name!

• The following is a communication from Mr Donovan :—

"Sir,—Should you take any notice of Mr Brindley's anti-phrenological campaign in London, I beg leave to inform you of the nature and extent of my interference, on the second evening of the representation of his misrepresentations at the Adelphi Theatre. The opening reference to the principles of Phrenology, made by Mr Brindley on the evening I was present, was a quotation from a small work on Phrenology, written, I believe, by Mr Carmichael of Dublin. There was no statement of the doctrines of Phrenology from Gall or Spurzheim, nor of any of the arguments or facts in support of either of the two great propositions upon which Phrenology is based. Some minor point of an anatomical nature, was, to the best of my recollection, the text from which he discoursed, and which afforded him a theme for exhuming the defunct argumentations of Dr Stone, 'et id genus.' During his hour's discourse, Mr Brindley gave frequent proofs, to phrenological perceptrives, that he did not know the situations assigned to the organs; and, in his attempted measurements, he exhibited equal ignorance.

"In coming forward on this occasion, I had no notion of entering into any refutation of the fallacies which he occupied an hour in uttering, whilst he kindly afforded only a quarter of an hour to the reply, further than those which my appeal to facts involved. I made the following proposal :—That I would examine ten or twenty heads, fairly and impartially chosen by and from persons unknown to me or to Mr Brindley, and that I would stake my own character morally and scientifically on the result. In reply to this offer, Mr Brindley insisted that the examination should be on that stage. This I refused to accede to, stating that I had examined heads for the Medical Society of the London University College, *not* in their Theatre, nor before an assembly, but in my own room; the papers having been afterwards read before the Society, to the complete conversion of the leader of the anti-phrenological party and many of his followers. The debate between Mr Brindley and Messrs Vernon and Logan having become rather warm, and the hour waxing late, I retired, having waited nearly an hour after my proposal. The night following, I had to deliver one of a course of lectures at Clapham, and not having been referred to in any way by Mr Brindley on the subject of my challenge, was not a little surprised to find it advertised and placarded, that I had 'pledged myself to come forward and examine heads that evening on the stage,'—not a word privately or otherwise having been said to me by any body, though I was at King William Street all day, as to the mode of selection, or any other preliminary. The only course open

to me, being engaged as before mentioned, was to contradict Mr Brindley's false statements, which I did by issuing a number of bills, one of which I enclose to you now.

"It appears that Mr Brindley did bring forward some boys *selected by himself*, where, or how, I know not, calling on me in a triumphant manner to come forward, and pluming himself on my absence, &c.

"I will admit that I was wrong in noticing Mr Brindley at all, for he ought not to have been noticed. I did not go the first night, and I would not have gone the second, but that I had heard of an opposition to him on the first night, and I wished to see how it proceeded. * * * I did not attend any other meeting of Mr Brindley's; the house was packed with claqueurs and ignorant non-phrenologists.

"On the evening when Mr B. treated of the immoral and irreligious tendencies of phrenology, I caused some hundreds of the bill No. 2 to be circulated in the Theatre. This opposition has given rise to enquiry, and of course to conviction; respecting such opposition, one may say in the words of Locke, 'I am no more troubled and disturbed with all the dust that is raised against it, than I should be to see from the top of a lofty tower where I had clear air and sunshine, a company of little boys, or great boys, for 'twere all one, throwing up dust in the air which reached not me, but fell on their own eyes.' It is believed that Mr Brindley has lost money, if he were the payer, by this undertaking. I am," &c.

The "bill No. 2," circulated by Mr Donovan, is as follows:—"ANTI-DOTE.—'That the moral and religious objections against the phrenological theory are utterly futile, I have from the first been fully convinced.'—*Richard Whately, D.D., Lord Archbishop of Dublin.*"

Milan.—When lately at Milan, I called on Dr Castle, who is publishing a book on Phrenology in Italian. It should receive a hearty welcome, even as it is, cut and marred by the police. The first three numbers I have got, but though suited for the Italians, they contain nothing new to us. Dr Castle proposes making an abridged translation of his work for the English market, in which he promises much new matter, founded on his experience and practice in the science. He and Count Neipperg (his indefatigable partner in labour of writing and in research), seemed to me to have a quantity of new ideas in their minds, which, I confess, I was quite unable to comprehend, perhaps from the difficulty of the subject, and want of time. However, they said enough to make me curious to read the, as yet, unpublished numbers of the work, and which I hope he will publish in English shortly. Cast-taking is unknown in Italy, even in the backward state in which it is in England. What a pity a handsome subscription is not made amongst phrenologists towards a high reward for the discovery of a new way to take casts, which shall be free from *all* the inconveniences of the present. It should be such a premium as would induce men of invention and talent to try their hands at it, and I have no doubt we should not long wish for it in vain.—I shall be happy, as the proposer of such a plan, to put my name down for L.50, for I ascribe much importance to the use of casts. I can conceive no better study than to be continually taking casts of those whose characters one well knows, and comparing them with each other, and remarking in what the heads agree or differ, as well as the characters. Indeed, comparison seems to be the soul of Phrenology. While the present mode of taking casts continues, such a thing is impossible. The annoyance, time, dirt, and expense, are far too great.

WM. M'PHERSON ADAMS.

Paris, May 12, 1842.

Account of a Phrenological Visit to the Penitentiary for young Criminals at Paris, made by M. VOISIN, in Company with a Committee of Members of the Royal Academy of Medicine, on February 17, 1839.—In addition to M. Voisin and the committee from the Academy of Medicine, there were present MM. Boullon and Pontignac de Villars, of whom the former was governor of the prison, the latter, secretary. Four hundred young criminals were examined, one by one, by M. Voisin; who, having looked at the form of each one's head, and examined it with his hand, directed him to go to the *right* or the *left*, according as his character or natural endowments appeared to be good or bad. These he subsequently divided into four classes, putting the worst in the first, the best in the fourth, and arranging in the two intermediate series those who formed a sort of *juste milieu* between the others.

Of the 400 boys originally examined, 254 were selected by M. Voisin as those whose good or evil qualities were most distinctly marked. The fourth, or best class, contained only 25, or one-tenth of the whole; while 61 were arranged in the first or worst class. Of the remaining 168, 77 were placed in the third class, 91 in the second, the bad again preponderating.

M. Boullon, the governor, then gave his evidence as to the character of the youths thus classified by M. Voisin. He stated that M. Voisin's first class included, in a very great proportion, the bad characters in the house, or those whose intellectual faculties were most limited. The second and third divisions appeared to M. Boullon not to offer any striking differences between each other; but the fourth class comprehended almost all those children who were most docile, most intelligent, and most industrious. This class included the greater number of those who were employed as monitors in the school, or as overlookers in the workshops. The testimony of M. de Villars corresponded almost completely with that of M. Boullon.

A long discussion followed the reading of the report in the Academy. The two chief objections raised by the debators were, that the testimony of the governor and secretary of the gaol was given after M. Voisin had pronounced on the characters of the boys, instead of before he had expressed his opinion; and secondly, that M. Voisin's classification implies that the intellectual and moral faculties are intimately connected, and become developed in the same proportion, while, in reality, no such absolute relation between mental and moral endowments exists.—*Bulletin de l'Académie Royale, Novembre 1841.*

Mr Hodgson's Lectures on Education, at the Liverpool Mechanics' Institution.—"On Saturday last, W. B. Hodgson, Esq., the able secretary of this institution, concluded a brilliant and effective course of eight lectures on the Philosophy of Education. Truly conceiving that education cannot be properly directed without a constant reference to the nature of the being to be educated, he laid the foundation in a broad and comprehensive view of the human constitution, and treated, in detail, of physical education, the education of the passions, intellectual education, education of the imaginative powers, and moral and religious education. The errors which have hitherto prevailed in the 'conduct' of education were pointed out, not in anything like a spirit of detraction, but only that the proper methods might be better understood and appreciated. The last two lectures were devoted to the consideration of national education, in the double sense of the 'education of all' and 'education conducted by the government.' Mr Hodgson pleaded earnestly for universal education, and triumphantly refuted the objections which continue, to the great grief of every enlightened mind, to be urged against it. As to national education, in the second sense, he ad-

mitted the difficulties in the way, but maintained the duty which the State lay under to instruct all whom she called upon to obey her laws. On the whole, Mr Hodgson has fully sustained, and, considering the greater difficulties of the subject, we should even say considerably raised, the high character which his former course on Phrenology gained for him; and we confidently trust, that his expositions of what constitutes a 'complete and generous education,' will, in due time, be productive of much good."—*Liverpool Albion*, May 2, 1842.

Improvement of the Human Race.—To the Editor of the Phrenological Journal.—Sir, In your number for January is a paper on "The Legal Protection of the Sentiments and Affections," which, although a lecture delivered before the Mechanics' Institute of New York, appears to be particularly addressed to the governing powers. The excellence of the paper cannot be questioned, but the success of it may be. That the legislation of the United States depends wholly on the people, no one knows better than Mr Hurlbut, and his address, therefore, appeals exclusively and emphatically to *them*, as the only source from whence the new laws for which he pleads can emanate, or by whom they can be enacted. Now, Sir, Mr Combe has proved in his "Notes on the United States of America," how little can be expected of any such enlightened legislation from the people of the States in the present average of their education, and perhaps of their phrenological development; for I have yet to learn from you that the last, under any sort of education, however general, would be capable of enabling them to appreciate measures founded on the "greatest happiness" principle. Being myself imbued with sentiments perhaps ultra-liberal, and having every reason to believe in the *science* of Phrenology, I cannot yet overcome the feeling of disappointment (now at the age of sixty) with which I have regarded the operation of that science, in destroying all the fine aspirations of my youth and manhood relative to the immediate emancipation of the human race from error and misery, by the effect of a general education of *one generation*, which I formerly sincerely believed could be effected. I now learn that a *moral* effect on the brain is very insufficient for this purpose without a *physical* change also; and how this new conformation is to be effected without some controlling power over indiscriminate propagation, I am at a loss to conjecture. Whether or not such a power as this can ever be permitted to exist, is a question not easily answered; but one thing is certain, I think, that it will never be established by the majority of the people; for a contrary opinion would involve this absurdity—that ignorance may become sensible of its own ignorance, and be willing to effect its cure by prohibiting, or abstaining from, all marriages between parties of low developments. If it be replied that the higher grades of intellect will influence the inferior by the use of their superior reasoning powers, this must be under the supposition, that the inferior possess sufficient of these powers to be thus acted on.

As for the efficacy of education alone, in producing through successive generations a sufficient alteration in the phrenological development of the brain in the great majority of the race, I cannot but consider this event as requiring a period not less than any of those recorded in geology.

The same reasoning will suggest thoughts as to the fitness of a representative government, for even a people of the highest known race as they at present exist.

These difficulties arose in my mind since Phrenology entered it, and most happy should I be to find that they can be explained satisfactorily by a science which I sincerely hope will shew us the straight road to human happiness.

I beg it to be distinctly understood that I wish to throw no doubts on

the truth of the science. My only object is to elicit its practical application.

H. A. M.

Bristol, 25th April 1842.

Statistical Enquiry.—*Las Cases*, in his *Journal* (part 6, page 88), says, that he "once knew a man, who, being much engaged in arithmetical calculations, confessed that he could not enter a drawing-room without being led irresistibly to count the people who were in it; and that, when he sat down to table, he could not avoid summing up the number of plate, glass, &c." Considering the pursuits of the person referred to, the habit was doubtlessly occasioned by the undue excitement of the organ of Number, which sought for employment when any external incitement was presented. But I am acquainted with a case wherein the organ of Calculation is very deficient; yet the person referred to is much addicted to statistical enquiries, more especially to those which possess a political or moral bearing; and these are the only subjects upon which his small arithmetical power is at all overcome. He rarely attends a public meeting without making a rough estimate of the attendance; and at the chapel which he frequents, he is accustomed to count the congregation, and he has kept a mental record of the average attendance for the last five years. His development presents a very large endowment of the organs of Order and Comparison; Causality is large; and the Sentiments are well developed, as are most of the Perceptives. In this case I am disposed to refer the natural disposition to the influence of large Causality upon large Sentiments, which will impart a bias to the investigation of questions connected with moral progress. Individuality will create a love of facts, and Comparison a tendency to collect illustrative particulars; whilst Order produces a love of systematic arrangement, and the active temperament superadds organic activity. The result of the whole combination is, that the inherent reluctance of Number is overcome; and it is excited into some degree of action, although still far below what would be accomplished were it largely developed.

E. J. HITCHIN.

Satanic Agency.—In a sermon preached at St Jude's Church, Liverpool, on the evening of Sunday, April 10, 1842, and published in the "Penny Pulpit," under the title of "Satanic Agency and Mesmerism," the Rev. Hugh M'Neile grants more power to the Mesmerisers than they are willing, it may be presumed, to accept the credit of, and supposes them to have a co-operator not fit to name to ears polite. On the subject of insanity he says, after quoting from Mark vi. 2. the case of the man with an *unclean spirit*—"Here was a poor creature whom we should now call a maniac, and whom we would now secure and take into a lunatic asylum, and, by means of a strait waistcoat, prevent him injuring his own body. Our philosophy goes no farther than this. Our medical practitioners would say that there was some disorganization of the poor creature's brain, and their philosophy goes no farther than organized or disorganized matter. But if Jesus met such a man—if he who can see into the spiritual world entered one of our lunatic asylums, he would see what our doctors cannot see, that the devil is there. *The devil has possession of many in the very same manner as he had before.*" Of the truth of the last sentence few can doubt.

C. DONOVAN.

Head of the Venus de Medicis.—"We only saw one female slave of great beauty, who, though very young, was already a mother, and had her infant in her arms. She was described to us as an Abyssinian, but had much more of

the light copper-colouring of the far East. Her hair was smooth and black, her features small and exquisitely proportioned, and the shape of her head faultless; so that if the phrenological criticism on the Venus de Medicis be correct, that a woman with a head so formed would be deficient in understanding, this beautiful little Abyssinian must have been a perfect idiot."—*The Hon. Mrs G. L. Dawson Damer's Diary of a Tour to Greece, Turkey, Egypt, and the Holy Land*, vol. i. p. 121.—The preceding extract has been sent us by a correspondent, "principally to elicit a note upon it," respecting the head of the Venus de Medicis. The only remark that seems necessary is, that phrenological criticism has never related to the "faultless shape," but only to the small size, of the head of the Venus.

Dr Spurzheim.—Extract from the article SPURZHEIM in the *Penny Cyclopædia*.—"In the articles GALL and PHRENOLOGY, we have given a general account of the differences between the systems of Spurzheim and his preceptor. The scientific reputation of the former must rest chiefly on his having proved the fibrous structure of the brain, and many other very important facts in its anatomy, which, though published in his name jointly with that of Gall, were certainly due to the researches of Spurzheim alone. These, indeed, have as yet no certain application in Phrenology; yet Spurzheim must be regarded as having exercised an important influence on the progress of that science. He claims the merit of having discovered eight new cerebral organs; of analysing and classifying the mental powers; of pointing out the moral and religious relations of Phrenology, and the relations of natural language or bodily actions to it, and of having made many improvements in the mode of investigating the facts bearing upon it. Admitting these claims, however, to their fullest extent, the scientific merit of Spurzheim (whether Phrenology be true or not) must stand far below that of Gall. The great influence which he has had in giving the predominant character to the Phrenology of the present day must be ascribed entirely to his power of rendering it a subject of popular study. For this purpose he was admirably adapted. He was an eloquent lecturer, and a most agreeable companion; his style both of speaking and of writing was fluent, bold, positive, and unhesitating; his illustrations were always pointed and amusing; his arguments, though often quite illogical, were very easy of apprehension; his conclusions general and indefinite; and he always treated his subject with an enthusiasm which none could feel but one convinced of the truth of his cause, and which was enough in itself to carry conviction to the minds of all who were not well-disciplined in the fallacies of science. That which Gall discovered and invented, but could scarcely have taught, was by Spurzheim made to seem intelligible to the most ordinary understanding; and to him, therefore, must be attributed the reputation of having made Phrenology one of the most popular studies of the present day." [We are led, by the reports of persons who attended the lectures of Dr Gall, to believe that his power of teaching is here underrated.]

Peruvian Skulls at the Bay of Santa, 8° 52' S.—"There is here an ancient burying-place of the Indians, which has been pretty generally turned up by visitors in search of huaqueros, or earthen vessels, found in the graves. The whole surface is strewed with skulls and bones bleaching in the sun, which receive many a kick by the idle passers-by. The back part of these skulls is almost vertical, and rises quite abruptly from the great hole at the base. The left side is generally much more prominent than the right. The forehead is narrow and retreating; and the line of the face is quite as perpendicular as that of the European."—*Three Years in the Pacific, by an Officer in the U. S. Navy*, vol. ii. p. 307.

Influence of Bodily Health on the Mind.—Lord Clarendon, in his *Essay of Sickness*, says,—“The greatest benefit of health is, that whilst it lasts the mind enjoys its full vigour; whereas sickness, by the distemper of the body, discomposes the mind as much, and deprives its faculties of all their lustre.”—(*Miscellaneous Works*, 2d edit. p. 146.)

In No. LXX. p. 81, we commented with some severity on a case published in the *Phrenological Almanac*, under the title—“Death from Excessive Exercise of Imitation;” remarking, however, that possibly that censurable title had been prefixed by the editor of the *Almanac*, and not by Mr Donovan, who communicated it in a private letter. Soon afterwards, we were authorized by Mr D. to confirm this conjecture, and, in justice to him, are happy to give publicity to the fact.

Books Received.—*Medico-Chirurgical Review* for April.—*British and Foreign Medical Review* for April.—Discourse introductory to *Lectures on Institutes of Medicine, &c.*, in the University of New York. By Martyn Paine, M.D.—*A Few Words to Tradesmen and to the Public on the Desirableness and Practicability of abridging the Number of the Hours of Business.* By A. J. K., Pp. 24. London: J. F. Shaw, 1842.—*A Review of Berkeley's Theory of Vision; designed to shew the Unsoundness of that celebrated Speculation.* By Samuel Bailey. London: J. Ridgway. 8vo.—*The United States Magazine*, Nos. XLI. and XLII.

Newspapers Received.—*Midland Counties Herald*, March 31.—*Cheltenham Looker-on*, April 2, 9, 16; May 7, 14.—*Cheltenham Free Press*, April 2, 9, 16, 23, 30; May 7.—*Bristol Mercury*, April 16.—*Cheltenham Examiner*, April 6.—*New York Watchman*, March 26.—*Liverpool Albion*, May 2.—*Liverpool Mercury*, May 6.—*Manchester Guardian*, May 14.—*Medical Times*, Part for May, and Number for June 4.—*Morning Chronicle*, May 28.—*Great Northern Advertiser*, June 9.—*The World*, June 4.

To Correspondents.—Mr Hytche's paper on the Temperaments, and that of Mr W. R. Lowe on the murderer John Williams, will appear in our next; also the short communications of Messrs Levison and Arthur Trevelyan.

To Subscribers.—Irregular delivery of the *Journal* in the country is sometimes complained of; but, as each Number is uniformly published in time for the monthly parcels from Edinburgh and London, the delay seems to be attributable to the country booksellers.

Communications for the Editor (prepaid) may be addressed to Mr Robert Cox, 25 Rutland Street, Edinburgh. Books or parcels, too heavy for the post, may be left (free of expense) with the London publishers, Messrs Simpkin, Marshall, & Co., Stationers' Hall Court.—Articles intended for the next following Number must always be with the Editor six weeks before the day of publication. Communications for the section of “*INTELLIGENCE*,” and also advertisements, should be in hand at least a fortnight before the same day. Charges for advertising:—eight lines, 6s.; twelve lines, 7s. 6d.; every additional line, 6d.; half a page, 14s.; a whole page, 25s. Advertisements may be sent to the publishers in Edinburgh or London.

EDINBURGH, 1st July 1842.

THE
PHRENOLOGICAL JOURNAL.

No. LXXIII.

NEW SERIES.—No. XX.

I. MISCELLANEOUS PAPERS.

- I. Report of the Proceedings of the Phrenological Association, at its Fifth Annual Session, at London, in June 1842.*

THE Association met in the Hall of the Society of Arts, John Street, Adelphi, on Monday 20th June, and the five following days.

At the first meeting, held at half-past one o'clock,—Dr Elliotson in the Chair,—the following Report of the Committee was read by Mr Richard Cull, one of the Honorary Secretaries:—

“The fifth session of the Phrenological Association begins to-day.

“Your Committee congratulate you on the eminent success of the fourth session, held in this room in June last year, and they anticipate an increasing success, as the importance of Phrenology in its several applications becomes more extensively known.

“Towards the close of the last session you elected a Committee of 24 gentlemen, with power to add to their number, viz.:—

“H. G. Atkinson, Esq., F.G.S.; Dr Barlow; Thomas H. Bastard, Esq.; F. B. Beamish, Esq., M.P.; Richard Beamish, Esq., F.R.S.; Dr J. P. Browne; H. B. Churchill, Esq.; George Combe, Esq.; Dr Conolly; Dr A. Cox; Richard Cull, Esq.; James Deville, Esq.; Dr Elliotson, F.R.S.; Professor Evanson; John Isaac Hawkins, Esq.; Wm. Hering, Esq.; Sir Geo. M'Kenzie, Bart., F.R.S.; Dr Moore; M. B. Sampson, Esq.; James Simpson, Esq.; J. Soper Streeter, Esq.; E. S. Symes, Esq.; W. C. Trevelyan, Esq., F.R.S.; Erasmus Wilson, Esq.

“Your Committee appointed Mr Sampson Hon. Sec., and

printed and circulated the Report of the proceedings of the fourth session.

“Your Committee simultaneously communicated with members of the Association resident in Edinburgh, Dublin, Manchester, and Bath, on the expediency of holding the present session in one of those towns; but the result was, that your Committee judged it to be more desirable to hold it in London.

“Your Committee added the following gentlemen to their number:—“Dr W. A. F. Browne; Dr A. Combe; R. Cox, Esq.; Frederick Dover, Esq.; Dr Engledue; Dr Forbes. F.R.S., F.G.S.; J. W. Gardiner, Esq.; Robt. Maugham, Esq.; Professor Rigoni (of Pavia); Samuel Solly, Esq., F.R.S.; Charles A. Tulk, Esq., F.R.S.; Thomas Uwins, Esq., R.A. And your Committee appointed Mr Cull Hon. Sec. with Mr Sampson.

“Unfortunately, the British Association for the Advancement of Science fixed their session to be held at the same time as ours. Your Committee, aware of the inconvenience which this circumstance would occasion to gentlemen who are members of both, considered the propriety of changing the time of holding the session; but they judged it would more conduce to the general convenience, not to disturb those arrangements which had been notified to the public through the *Phrenological Journal*.

“In consequence of the appointment of Mr Sampson on a mission to the United States of America, he was compelled to resign his Secretaryship, when Dr Moore kindly undertook to perform the duties of the office.

“At the business meeting of the Association on Friday at one o'clock, the financial statement of the Committee will be submitted to the members.

“The functions of your Committee will end with the session, when you will be called upon to elect a new Committee.

“Your Committee have much pleasure in announcing that Mr Deville has kindly offered to the Association the loan of casts from his collection, to illustrate any paper for which the author may desire it; and that Mr Deville will open his museum to the members from 10 to 5 on the mornings of those days when the meetings take place in the evenings. Your Committee remark that these offers are a repetition of last year's kindness.

“The diagrams around us are kindly lent to the Association by Mr Cull, which your Committee remark is also a repetition of last year's kindness.

“Your Committee have next the painful duty of recording the decease of three gentlemen connected with the science,

since last we met, one of whom was then a member of the committee: these are, Lord Douglas Gordon Hallyburton, who was long known as an experienced and zealous phrenologist; Henry Clarke, M.R.C.S., also a member of the Association, a well informed phrenologist, and of whom a worthy notice has appeared in the *Phrenological Journal*; and, lastly, William Scott, who, although not a member of the Association, yet has left a name so intimately connected with the science, and was its advocate too at a time when an avowal of conviction of its truth so often brought obloquy, that your Committee feel gratitude for his exertions, and justice to his memory demands this notice.

"In conclusion, to guard against the possibility of misconception, your Committee, following the example of the Royal Society, think it necessary to state that the Association, as a scientific body, is not responsible for the opinion of any of its members.

"Your Committee state this in their anxious endeavour to preserve the utmost freedom of thought and enquiry for each member, while securing also unanimity of feeling, and singleness of exertion, both in advancing and in diffusing the knowledge of Phrenology, to aid in the great work of improving the physical, intellectual, and moral condition of man."

Dr W. C. ENGLEDDUE of Portsmouth then delivered an Introductory Address. He commenced by observing, that the doctrines he was about to advance must be received as the opinions, not of the Association as a body, but only of a section of its members. Uniformity of thought was certainly a desirable object, but could not be otherwise obtained than by the establishment of true principles. Influenced by this object, he would insist on the future exposition of our principles being preceded by the inculcation of material doctrines,—not with any sectarianising spirit, but with the hope of seeing all influenced by that great power—Truth. After alluding to the characteristic tendency of the present generation to form societies for the promotion of scientific research, and speaking of the benefits which have resulted from the labours of such bodies, Dr Engledue proceeded to express his regret that the study of human nature had not been included among the objects of the British Association for the Advancement of Science—that Man, the most intricate piece of organism—the most astounding specimen of nature's efforts—the very top-most link in that chain of life spread daily before us—the vitalised lump of clay wearing the human form—claims not a moment's consideration. We must (continued Dr E.)

work out this problem; and in our researches we are not to discourse concerning essences, spirits, or the immaterial mind, but concerning one of the innumerable modifications of matter—we have to investigate one portion of man's organism (brain), and we have to determine its peculiar functions. Having taken this preliminary step—understanding what man really is—we have next to apply this knowledge; and by this means great changes will be effected. Nevertheless, we must perform this duty apart from every other consideration, apart from received opinions and doctrines, and unmoved by the weight and number of antique theories.

The accumulation of our facts, our observations, and our experiments, would be perfectly useless if allowed to continue a chaotic mass, without arrangement, classification, and generalization. Facts form the basement-structure of our system of philosophy. But the period is come when we must cease speaking of our facts only—the constant inculcation of them was necessary during the first promulgation of our views—it is now our duty to apply them, to build up a system, and then make it bear on specific points. The value of the marble is not known, and its beauty is not seen, while it lies concealed in the quarry, untouched by the chisel of the sculptor; so, in like manner, the applicability, the great power and tendency of our principles and conclusions, are either unseen, or their vast importance unrecognised, if allowed to remain in their present position, and not made to exert their influence on questions bearing most powerfully on man's progression. In pursuing this course, we must expect difficulties; but we must remember, that in the majority of instances we have to deal with untrained intellect, and consequently with the slaves of prejudice—we have to fight with those who are still influenced by the impressions communicated during infancy. Some from sloth, and others from a deficiency of moral courage, are deterred from examining the views and doctrines they embrace, and thus prolong their infancy to the tomb. Can we wonder at the opposition offered by such characters? Can we be surprised if they denounce physiological investigations as evil and unwise speculations? Why are the conclusions of inductive research evil and unwise? Because such conclusions overthrow preconceived fancies and opinions, and bid the offspring of the imagination give way to a candid and scientific appeal to man's reasoning faculties. Since we address ourselves to the intellect, we ought not to consider the prejudices of the multitude. We have all sinned in this particular; we have all been too anxious to make our views dovetail with the views

and opinions now current in society. No Cerebral Physiologist should do this. By this title, we mean the individual who is conversant with the cerebral organism of man and the lower animals—we mean the philosopher, and not the empiric—the physiological investigator, who, after deducing certain principles for his guidance, boldly follows them out, and fears not the result, however it may interfere with received opinions and established dogmas.

We are perfectly aware that the views which such considerations open up are new and startling,—but they are true. The promulgation of these views may produce inconvenience to some, and uneasiness to others ; but no considerations of this kind can offer any good reason for their suppression. Are we to sacrifice what we conceive to be truth, at the shrine of expediency? Is ultimate good to be lost sight of? Are we to be the butterflies of a day, and unalloyed selfishness our ruling passion? Are we to employ ourselves in pandering to the tastes, fancies, and prejudices of our own generation? Are antique theories and visionary speculations of more importance than laws deduced from a careful consideration of man's nature?

We should cease our endeavours to reconcile our views with any particular kind of doctrine, because it is dishonest, and boldly assert what we consider truth, regardless of the effect. We dislike all attempts at mutilation. Let Truth be the idol of our reverence. No real good has ever been effected by stifling truth, but immeasurable mischief has always resulted from the promulgation of error. It is truth which makes free—and the continued promulgation of truth is the only way to ensure perfect freedom.

(After adverting to the vast changes which are now in progress in the state of society, and the still more astonishing improvements which may be anticipated from the prosecution of the study of human nature, Dr Engledue proceeded)—

Exactly twelve months have elapsed since we were assembled in this room for the purpose of promulgating views considered to be of essential importance to the well-being of our species. How have we spent the intervening period? What means have we taken to insure their reception? What steps shall we take to inculcate the necessity of educating the rising generation in our system of philosophy? What is the cause of so much doubt concerning a question so important, so self-evident? What prevents its reception?

It has appeared to us, that the very first axiom of our science is erroneous. “The brain is the organ of the mind.”

Mr Combe states—“We do not in this life know *mind* as one entity and *body* as another, but we are acquainted only

with the compound existence of *mind* and *body*, which act constantly together, and are so intimately connected, that every state of the *mind* involves a corresponding state of certain *corporeal organs*, and every state of *these organs* involves a certain condition of the *mind*."

A similar doctrine we shall find inculcated by almost all writers on Cerebral Physiology.

This is mere assumption. We boast that our science is purely inductive, and yet in the enumeration of our axioms we assume a position all our facts tend to disprove. To evade the charge of materialism, we content ourselves with stating that the immaterial makes use of the material to shew forth its powers. What is the result of this? We have the man of theory and believer in spiritualism, quarrelling with the man of fact and supporter of material doctrines. We have two parties: the one asserting that man possesses a spirit superadded to but not inherent in brain—added to it, yet having no connection with it—producing material changes, yet immaterial—destitute of any of the known properties of matter—in fact, an *immaterial something*, which in one word means *nothing*, producing all the cerebral functions of man, yet not localized, not susceptible of proof; the other party contending that the belief in spiritualism fetters and ties down physiological investigation—that man's intellect is prostrated by the domination of metaphysical speculation—that we have no evidence of the existence of an essence, and that organized matter is all that is requisite to produce the multitudinous manifestations of human and brute cerebration.

We rank ourselves with the second party, and conceive we must cease speaking of "the mind," and discontinue enlisting in our investigations a spiritual essence, the existence of which cannot be proved, but which tends to mystify and perplex a question sufficiently clear, if we confine ourselves to the consideration of organized matter—its forms—its changes—and its aberrations from normal structure.

Almost all physiologists commence their investigations with an unfavourable bias. How is this? Because they first adopt a theory, and then commence their investigations; instead of first taking a wide and extended view of human and comparative physiology, apart from preconceived opinions: because in their infancy they were taught that man's position depended on the possession of some essence; and in their manhood, that intellect, which should investigate the grounds for such a belief, is cabin'd, cribb'd, confin'd, by the apparent necessity for such a speculation. Is it necessary to prove this? Consult physiological writers, and we find that they are perfectly sa-

tified that the seat of mental operation is the brain, and no other organ; yet they contend that nothing more has been proved than this—that the brain, by its peculiar organism, is the instrument by which the mind acts. They introduce us to a phantom—they call forth a spirit, and, without the shadow of a proof, state, it guards, governs, and directs material movements.

We contend that mind has no existence—that we have to consider matter only.

What is organized matter? Merely a collection of atoms, possessing certain properties and assuming different and determinate forms. What is brain? Merely one kind of organized matter. What do we mean by cerebration? The function of the brain—one of the manifestations of animal life, resulting from a peculiar combination of matter. The varied changes of form which this matter assumes give rise to the numerous manifestations of cerebration in the different tribes of beings, and the varied changes of cerebration in the same being originate in molecular alterations, merely other expressions of a new condition.

Cerebration, then, expresses the manifestation of a series of actions resulting from the properties possessed by a particular portion of organism (brain) when acted upon by appropriate powers. In the same way as organism generally has the power of manifesting, when the necessary stimuli are applied, the phenomena which we designate by the term life—so, one individual portion (brain) having peculiar and distinct properties, manifests, on the application of its appropriate stimuli, another species of action, which we propose to call cerebration. If the sum of all the bodily functions—life, be not an entity, how can the product of the action of one portion of the body (brain) be an entity? *Feeling and intelligence are but fractional portions of life.*

The “why or how” such a form of matter is capable of manifesting such peculiar function we cannot explain: it is sufficient for our purpose to decide that it does so—we may never go further. Does any one doubt the power of matter to do this? To such a one we would say, Who dares assign limits to the inherent powers of matter? Let us first find out all that matter *can do*, before we dogmatize and assert what it *cannot do*.

No action can go on in an organ, that is to say, no manifestation of the function of an organ can go on, without a change in the organic molecules composing it. This position was beautifully verified in the case related by Mr Combe, where the skull-cap having been removed by an accident, and the

brain exposed, he was enabled, by conversation, to excite particular faculties, and he noticed that the manifestation was always accompanied by a peculiar movement in the portion of brain forming the cerebral organ. We are at present quite incapable of ascertaining by what means impressions made on the organs of the senses are conveyed to the brain, or how the various stimuli emanating from the brain are conveyed to the several organs. This is most probably, by a change in the molecular arrangement, as rapid as galvanic action, and perhaps more so. However, we know as little about this as we do of the nature of light, galvanism, or electricity.

In an organ whose function is to secrete a fluid, we are perfectly aware that the fluid may be vitiated and altered by a very slight change in the ultimate structure, and at first the change is not appreciable by our senses. If abnormal function continue, it is the result of absolute organic disease; that is to say, there is an alteration in the arrangement of particles quite incompatible with healthy action. In like manner, an alteration of cerebral structure is always the cause of abnormal cerebration. We see no better reason for supposing that the manifestation of cerebration depends on the excitation of cerebral matter by "an essence"—"a principle"—by "the mind"—than we do that the bile and the saliva are secreted by their respective glands, through the instrumentality of the same or some other essence. We do not speak of liver principle or salivary principle. We see a certain arrangement of particles in the form of an organ called liver, and a certain kind of blood sent to it; the result is, the secretion of a particular fluid, which we call bile; further than this we cannot go: no other organ is so organized, no other organ produces a similar secretion.

We see certain articles of food conveyed to the stomach excite it to the performance of its function—Digestion. The external senses receive impressions and convey them to the brain, and excite it to the performance of its function—Cerebration. As the perfect performance of digestion depends on the healthy state of the organ—Stomach; so the perfect performance of cerebration depends on the healthy condition of its organ—Brain.

It may be said, these views partake of the grossness of materialism—I have yet to learn there is grossness in truth; that they tend to shock harmless prejudices,—I have yet to learn a prejudice can be harmless; that they will produce a revolution in prevailing modes of thought, and overthrow received doctrines and acknowledged principles. Be it so. If principles, doctrines, and orthodox formulæ for thought, are erroneous, and render men purblind, sweep them away. Fear

not truth—disdain not reason—follow not authority—let opinions be maintained by the firmness and solidity of their bases.

But some one remarks, This is not the doctrine of Gall. Where are there ten Cerebral Physiologists who have studied his writings? It is a crying shame that we are not more intimately acquainted with him—more influenced by his boldness—more anxious to profit by his researches—more ready to adopt the same truth-loving course of inquiry. But this is Gall's doctrine. How miserably have we fallen off and neglected his views! He says, "Your understanding, your volition, your free-will, your affection, your judgment, instinct, &c., will be no longer personified beings—they will be cerebral functions!" Is this not an intimation of the very doctrine we have inculcated? But suppose we had not been supported by Gall—how senseless the objection! The science he left in its infancy has been cradled and nursed, but we find it still comparatively in its infancy. Are his writings to be always referred to for the truth of views deduced from the position of man generations after his removal? Such a notion is untenable—it strikes at the root of all progression, and if applied to the discoveries and advancement of any other science, to the labours of Davy and Dalton, of Newton or Herschel, would be considered unphilosophical in the extreme.

Again: we would ask those who are still doubtful, Whether by means of intellect they gain a knowledge of the existence of anything independent of matter? We would ask them whether they can picture to the imagination "the mind" of man apart from the organism composing the man? If they cannot do this, we say, Why make man an exception to the invariable law of nature? Why, in ascending link by link the chain of organic life, add an indefinable something to the last link, which it was found unnecessary to call to our aid in the preceding? Witness the unrelenting and savage ferocity of one tribe; the fidelity and tameness of another; the sagacity, gentleness, and intellectual manifestations of a third: contrast all these with the characteristics of man, and explain, if possible, why we are to have recourse to theory? Why, in jumping from the sagacious monkey to man, are we to have recourse to the stimulus of an essence for explaining the superior cerebration he manifests? Why not give a portion of this or some similar essence to the monkey, because his cerebration is superior to the sheep's or goat's? Nay, why not allow a minute portion of some more impoverished essence to the fish, which obeys the call of its feeder, and swims to the required spot for its daily nourishment? If this be ridiculous—if no addition be requisite to account for the improved cerebration of infe-

rior beings—why, without the slightest evidence, are we to suppose that a higher order of cerebation in man cannot be manifested without such addition?

It is this conjectural doctrine—this belief in the individual and indivisible essence of mind—this love of the marvellous—this thirsting after something mysterious,—which is retarding the progress of cerebral physiology, and, in the same ratio, the happiness of man. It is this clinging to old opinions—this disinclination to shake off old garments, which is the cause of so much doubt concerning a question so self-evident. We oppose this system by the antagonism of *Reason* and *Nature*. It is impossible any longer to countenance the opinion. It must be rooted up. It is like a malignant disease, which can only be cured by extermination. Let it be boldly stated, because it is true, that, as philosophers, we have to deal simply and exclusively with matter. Man neither possesses, nor does he need the possession of any other stimulus than that which is given to the simplest of organized beings. From the lowest and simplest of organized beings, to the highest and most complicated, there is nothing more than a gradual addition of parts, accompanied by concentration.

Can any other facts be advanced to prove that cerebation is merely one of the manifestations of animal life, resulting from a peculiar combination of matter? Yes! we appeal to all animated nature—every physiological fact proves this. If we survey our own structure, we are convinced that the organ has some definite function to perform, and consequently, that each function can be referred to a particular organ. We cannot conceive action independently of cause. Since, then, no manifestation of any power whatever is demonstrable in living beings without being referrible to some portion of their structure, it necessarily follows that cerebation must be considered an attribute of a part of the same structure; and since the phenomena of cerebation have never been seen, except in connexion with a brain, it legitimately and logically follows that the former has a connexion with the latter in the relation of cause and effect.

Survey the leading characteristics of the nervous system in the various tribes.

In the lowest class, the infusoria, the tissues appear to be homogeneous—there seems to be an absence of cognizable nervous matter. But we must not forget the fact, that the want of power to detect is no proof of non-existence. Even in the human eye, the arrangement of nervous matter called retina would not be visible, if it were not for the other tissues entering into its composition: hence, we learn that it is quite

possible to conceive the existence of nervous matter, although of a nature so transparent and unmixed, that it remains invisible to our senses. Analogy would lead us to conclude that there is a nervous system in these tribes. How can we avoid the belief, when, notwithstanding their excessive minuteness, requiring a microscope to display them, we see them discriminate and seize their prey—contract and bend their bodies in every direction—appear conscious of each other's approach—in fact, perform movements with as much regularity and precision as animals who undeniably possess a nervous system? From recent researches it becomes more and more probable that we shall soon be in a position to demonstrate the nervous system in all the infusoria, without distinction.

However, to discard doubtful points: as we proceed to investigate higher tribes, we find nervous matter assuming regular and determinate forms. We perceive ganglionic centres arranged exactly where they are required; and in the centres of these ganglia we find particles of grey matter, which we shall presently see is considered to be the source of power in the higher order of brains. If great locomotive powers are necessary, ganglia are placed in the neighbourhood of the organs destined to serve this purpose. If powerful digestive organs are required, nervous energy is supplied by an assemblage of ganglia round the digestive apparatus. In some a considerable portion of nervous matter is above the œsophagus, and may be considered analogous to the brain of higher animals. In this way we may investigate, till we arrive at the Vertebrate classes, where we find cerebral lobes and a cerebellum. Now, in proportion as we ascend in the scale, we observe increased development of these portions, and a greater amount of intelligence; in fact, more perfect cerebration. The surface of the hemispheres becomes convoluted, and the arrangement of the white portions increases in complexity. In the brain of the fish there is a want of that concentration so characteristic of the nervous structure of the higher orders. Every nerve terminates in a distinct and appropriate ganglion, and hence the peculiar appearance.

In reptiles we observe a considerable development in the cerebral hemispheres, and a proportional diminution of those portions connected with the sensory nerves.

In birds the brain and spinal cord are developed after one uniform type; and here we have the human brain in miniature: of course, cerebration is found to bear a relation to this development. In fishes the several portions of nervous matter were placed one after the other; but here they are placed one over the other, forming one mass, the cerebral hemispheres covering all these portions supplying the organs of the senses.

No doubt this is for the purpose of attaining more complete consentaneousness of action. The hemispheres have not yet assumed the convoluted appearance, but in the interior they present collections of cineritious matter, through which the fibres of the spinal cord pass.

In *Mammalia*, the most perfect specimen of which class is Man, we find the hemispheres assuming a convoluted appearance, and the number and depth of these convolutions increasing as we ascend from the lowest to the highest. They are, comparatively speaking, absent in the rat, mouse, and rabbit; more distinct in the whale and dolphin; still more in the camel, stag, and sheep; and very strongly marked in the tiger, dog, cat, and monkey tribes. Besides this peculiarity, the distribution of the fibres of the hemispheres becomes more and more complicated, for, in addition to the ascending or sensory fibres, and the descending or motory fibres, there are those forming the commissures connecting the two hemispheres; and to add to the complexity, there are those which bring the different parts of the same hemisphere into connexion with one another.

What, then, do we perceive by this very superficial survey of the nervous system? What conclusion is forced upon us? This:—Commence where we will, even at the very zero of animal existence, and ascend to man, there is a gradual increase of size, greater concentration and complexity, and, *pari passu*, a higher order of cerebration. Is not the conclusion logically deduced from the premises? Have we not now obtained possession of a key which will unfold to us new views—open up new thoughts—and solve questions, the want of power to elucidate which has rendered man so long a puzzle to himself?

We investigate the perfect brain of man, and we become acquainted with a most beautiful and complex structure, performing a certain function. Comparative physiological research furnishes us with facts proving the same position. But comparative physiology furnishes us with other facts. We can now prove that the beautiful simplicity and invariability of the laws governing inorganic matter is common to the laws regulating organized matter. The perfect man does not reach perfection by the gradual increase of a perfect form from the commencement; on the contrary, it is capable of demonstration, that the development of his several organs follows certain and invariable laws, and that these organs temporarily assume many forms, which the organs of the lower orders of beings permanently retain. The brain in its development is not an exception to this law. The brain of the most pro-

found philosopher—the brains of Bacon and Newton—of Shakespeare and Byron, during their formation, assumed for a short time the peculiar form of the same organ in inferior beings. Is this a humiliating reflection? By no means. What is the practical application? If we see that the brain of the human being passes during its gradual development through so many inferior types, it is possible there may be a stoppage of development of some particular portion. Such we really find to be the case. Human beings are sometimes born without a brain—in other cases the hemispheres are wanting, and the mass presents the appearance we see in fishes—in others, the posterior part of the brain is developed, the anterior and superior portions remaining very small. Thus we learn the cause of many cases of idiocy; and these views, when fully investigated, may throw a flood of light on the laws regulating the minor modifications of cerebral matter. In some cases of malformed brain, instincts present themselves which are never manifested when there is a proper balance existing between the several regions. This was seen lately in a most remarkable way at Paris.

A peep into Nature's laboratory is an excellent cure for chimerical notions; and one glance at her secret workings will do more to annihilate the fancies and speculations of spiritual philosophers, than the daily repetition of wordy and theoretical disputations.

But our investigations must not rest here. Having examined the nervous organism in the mass, we naturally ask, What is its ultimate structure? This question opens a wide field for research, and a rich harvest remains to be gathered in. When we speak of a nervous system, many other considerations require attention besides the mere external form and size. It would be impossible, *à priori*, to imagine the same formation to extend throughout. A very superficial examination reveals to us two structures. But the application of great ingenuity, and the aid of powerful microscopes, are required to inform us of the ultimate structure of these two tissues; and from this it follows that the diseases—the organic changes—may not be visible without similar assistance. The white matter is composed of millions of tubes—the grey matter formed by innumerable nervous granules—each tube of a certain diameter, and performing a separate and distinct duty—and each granule connected to its neighbour by minute fibres, the two conjoined forming a laboratory for the elimination of nervous power—for the appreciation of various stimuli—and for the secretion of thought.

When we have ascertained the minute structure in a gene-

way, our labour is not finished—we have still to obtain a correct knowledge of the ultimate structure of *individual portions*.

Thus, nerves proceed from the organs of the senses to different portions of the cerebrum. Can the ultimate structure of all these portions be the same? It would be folly, and contrary to all analogy, to suppose that portions of cerebral matter of the same structure take cognisance of volatile particles, and tremors of the air—perceive the picture painted on the retina, and impressions produced by acids or sugar applied to the tongue. What difference has been detected in the ultimate structure of the convolutions forming the organs of *Destructiveness* and *Benevolence*, *Self-Esteem* and *Veneration*, *Firmness* and *Philoprogenitiveness*? Because two portions of brain appear to possess the same structure, are we justified in assuming that they really do? *Motiferous* and *sensiferous* nerves are not to be detected by any external mark, but the microscope has lately removed the apparent anomaly. The ordinary excitation of the nerves of smell depends on the impression of odorous particles on the minute branches of the olfactory nerve. The agreeable or disagreeable smell will depend on the character of the external stimulant; but the reason why the same stimulant should be agreeable to one and disagreeable to another, must arise from the peculiar structure of the cerebral organ with which the nerve is in relationship. A difference in the mere peripheral expansion of the olfactory nerve will never account for the peculiarity. Again: why does the same sound affect two persons so differently? To one person the noise produced by sharpening a saw is extreme torture—to another, not at all disagreeable. The sonorous vibrations must come to the ear with the same intensity; and why not the same result? We must seek for the cause of this difference, not in the structure of the external apparatus—not solely in the structure of the auditory nerves, but in the peculiar molecular organism of the cerebral organs. We recognise this mode of reasoning, when we say some persons perceive particular colours, and that others do not. We do not account for this difference by examining the eye for proof of a different structure, but appeal to cerebral physiology, and obtain the knowledge that there is a portion of brain for recognising the varied shades and combinations of colours.

The slightest alteration invariably produces a different action. A difference in the direction of the minute tubes, in the thickness of their walls, in their contents, the slightest increase or diminution of pressure, a new arrangement of the

grey globules, an alteration in their size and shape—all these changes cannot be detected with the unassisted eye, yet they may give rise to important changes of function.

The improvements which will take place in the treatment of Insanity will emanate from our improved physiological knowledge of ultimate structure. The microscope must be appealed to. Insanity is abnormal cerebation, unhealthy action of a portion of matter. We hear it constantly asserted that the brains of individuals who have been insane for years have been examined, and no trace of diseased structure discovered. But how have these examinations been conducted? Still by slicing piece after piece, by tearing and pulling. The cause is not to be sought for, then, in the general appearance presented by the *brain*; but the healthy ultimate structure of each individual portion being ascertained, the cause of the peculiar form of insanity must be sought for in the aberration from the normal standard of a particular portion or portions of brain. Till this is done, we must remain in the dark; and, we would contend, the treatment of many of these cases must be empirical.

Intimately connected with this portion of the subject is the consideration of the form, size, and position of the convolutions. We are too much engaged in attending to the external form of the cranium, and not to the convolutions. Every observer must have noticed the difference in the shape and course of the convolutions in the two hemispheres. Difficulties should be always met fairly. This is a point requiring investigation. We require drawings of the surface of a great number of brains; we should then be enabled to ascertain whether the irregularity was always confined to the same convolutions, and to the same side of the brain. Such considerations suggest the propriety of adopting some plan for the division of labour. In all other sciences this course is followed. Our science might be divided into several compartments, and committees appointed for the investigation of particular questions. Stated periods for the reception of reports might be fixed, and inasmuch as they would embrace all that is known at the time, their value would be increased by their publication and circulation amongst our members; thus diffusing important information, and exciting many to original investigations.

With regard to the development of particular portions of brain, and their respective functions, more particularly with our new assistant, Animal Magnetism, great victories might be gained. To accomplish this, certain divisions must be fixed,

and individuals appointed to investigate and report on them alone.

There is another subject which appears to me to be forced on our attention: it is the present state of our bust. This has been referred to in a pamphlet published by my friend, Mr Prideaux. Every portion is included by lines, with scarcely any attention to the natural shape of the organs. If the plan had been pursued of marking the centres of development only, as was done by Gall, instead of marking by lines the presumed outline, which is only to be done in very well developed cases, and should only be figured on the bust when many cases prove the correctness of the conclusion, we should find a very large portion of the surface unappropriated. This is a subject requiring serious consideration. By the course here alluded to, the stimulus to original investigation is destroyed, by an external appearance of completion and perfection.

I have now to introduce to your notice a subject of surpassing interest—*Animal Magnetism*. We all remember the ridicule thrown on our own science a few years ago, and we are all perfectly aware of the absurd notions which are prevalent regarding this interesting subject. It is not my object to enter into any lengthened detail of the extraordinary phenomena manifested during magnetic sleep, except in as far as they bear on Cerebral Physiology.

The conduct of the medical profession has appeared to me *most disgraceful, most derogatory*. They have refused to investigate; they have countenanced the attack and the scurrility, and remained satisfied with the assertions of *one individual, who is now notorious for hazarding an opinion on a subject he was profoundly ignorant of*. They have allowed him to make the columns of their own periodical the channel for abusing and denouncing one of the first physicians and physiologists of the day, and one to whom they owe a deep debt of gratitude for many improvements in the practical department of their profession. I regret this, because by education and scientific acquirements they were peculiarly called upon—the public look to them—for an opinion on such subjects. The discovery of a new ganglion, the minute structure of nervous tissue, the arrangement of the fibres of vegetable matter, or the recent microscopic discoveries in various organs—all these points are carefully investigated—all these experiments are repeated again and again—comments are made, errors detected, and truth ultimately placed on a firm basis. But how is it with the experiments of the magnetizer? Because they are per-

formed on living matter, and open to the investigation of every one—because they overthrow preconceived notions—because the subject is ridiculed, and, therefore, it is not scholastic to believe—these experiments are not repeated; nevertheless, comments are made, prejudices excited, and Truth left to grope her way, in spite of the efforts of the ignorant and interested.

Having experienced such treatment in the infancy of our own science, it behoves us to avoid a similar line of conduct. The occurrences of the last few weeks would prompt us to be quick in our movements. We find clergymen exciting the prejudices, by appealing to the passions, of their hearers, instead of assisting to expound Nature's secrets, by appealing to their reason. We find them breathing forth fulminations against the investigators of Nature. One has published the sermon he preached, in which he denounced magnetisers as sorcerers, in league with the enemy of mankind, because they cannot put forth a scientific statement of the laws by which the magnetic phenomena are produced. If the people are to be excited and prejudiced by religious orators regarding a scientific subject—a subject peculiarly the property of physiologists,—no time should be lost in boldly taking ground, asserting our rights, and thus preventing even the attempted repetition of those scenes and crimes of the dark ages, the result of priestly domination, bigotry, intolerance, and ignorance.

The discovery of the magnetic excitation of cerebration, as far as I am aware, was made in this country by my two friends, Messrs Mansfield and Gardiner. These two gentlemen communicated their experiments to me, and I immediately attempted to excite the cerebral organs of one of my patients, who had been regularly magnetised by me for some time, for the cure of disease. Exactly the same results were obtained.

On the 7th October 1841, Mr Gardiner, during the magnetic trance of his patient, played a few notes on a small musical instrument; the patient kept time by a lateral motion of the head. He then sounded the instrument without attending to harmony. The patient shuddered, and appeared to be distressed. He interrogated her as to the cause of this distress: she replied she was in pain; and when asked where, she placed a finger of each hand on the organ of Tune, on the same side. I shall not soon forget the enthusiasm of my friend when he communicated this result to me. An apple falling from a tree suggested to Newton the laws by which countless worlds hold their unvarying course; and the muscular distortion of a human countenance suggested thoughts which will

assist in unfolding the greatest problem in Cerebral Physiology. After this experiment, Mr Mansfield returned to Cambridge, where he became acquainted with a gentleman eighteen years of age, exceedingly susceptible of the magnetic influence. The first intimation he had of the fact that the magnetiser could excite a cerebral organ, was on the 18th of December 1841. This patient manifested impaired sense of time. He said, for instance, that he had been in a room half an hour, when he had been there more than two hours, and on another occasion two hours and a half; he would refer to events that had taken place more than half an hour before, as if a few minutes only had elapsed. Mr Mansfield breathed on the organ of Time, and then asked his patient the same question, when he named the exact period.

On another occasion he was eating his dinner, and became exceedingly facetious, his conversation flowing in a strain of the ludicrous, that was absolutely irresistible. Mr M. touched the organ of Wit, with the intention of arresting his flow of humour; instantly his countenance assumed a grave appearance, and though his conversation continued, the humorous vivacity and drollery entirely disappeared. After a few minutes Mr M. blew upon the organ, and immediately the comic strain was again indulged in. The organ of Alimentiveness was paralysed in the same manner, and again excited; also the organ of Firmness. On the 25th of December Mr M. accompanied Mr Gardiner on a visit to his patient. This was the first opportunity Mr Gardiner had been enabled to commence his experiments, and to enter into details; and I am only stating what I know to be true, when I assert that it is owing to his great exertions, his untiring patience, his ceaseless enthusiasm, and his constant anxiety to promulgate truth, that I am enabled to detail to you the leading facts of this extraordinary discovery. He first directed the public attention to this subject in a letter in the *Hampshire Telegraph*.

The cases of my friends are exceedingly interesting, but I think it will be more in accordance with your feelings and wishes, if I confine myself to the relation of my own case.

The case which I am about to relate is that of a young lady, sixteen years of age, who has been confined to her bed for eighteen months. She had been magnetised for some time, and, during the trance, had manifested a number of extraordinary phenomena, but I shall confine my relation to the experiments on cerebration.

The patient having been placed in the trance, was allowed to remain quiet for a short time. I then simply applied my finger to the organ to be excited, and willed that it should be-

come so. The excitation, in the majority of cases, was instantaneous.

Thus, the finger applied to Imitation produced the most splendid mimicry it is possible to conceive. The words and gestures of friends were copied in the most exact manner. Anecdotes which had been forgotten by all the members of the family, were repeated in a way that brought the circumstances instantaneously to their recollection, notwithstanding many years had elapsed. On one occasion, the manifestation of the faculty was permitted to continue for half an hour, and was then stopped by a waive of the hand over the organ, without contact. The finger on Wit produced immoderate laughter, checked by a waive of the hand, and reproduced by a touch of the finger. The finger on Colour caused the patient to see a variety of colours, which, she said, were coloured worsteds. The finger on Size, caused her to say she saw "heaps of skeins." When asked the supposed weight of the quantity, she replied she did not know. The finger on the organ of Weight caused her immediately to exclaim, "hundreds of pounds."

Self-Esteem, Firmness, Veneration, Benevolence, Philoprogenitiveness, Caution, &c. &c., were all excited with corresponding results. The natural language of each faculty was most beautiful, and the patient in the natural state could not manifest the function in any degree similar.

The organs remained active, even after the patient had resumed her natural state. This was so marked, that the attendants have frequently requested me not to demagnetise the organ of Benevolence, because, when this was allowed to continue active, she was so much more kind and affectionate.

Mr Atkinson, Mr Brookes, Mr Prideaux, Capt. Valiant, and Dr Elliotson, have all obtained similar results, and experiments have been made in America which also prove the truth of these statements.

By a perseverance in these experiments several new organs have been discovered; but it would be premature to publish the results of a few experiments only. The object is to excite attention and inquiry, and to remove prejudice.

Who can foresee the application of this astounding discovery? Do we not obtain a glance of a new method of treatment in cases of insanity; and are we not furnished with a means of exciting the cerebral organs, which may prove of vast importance—may possibly prove to be a mighty power in the hands of those to whom the education of youth is entrusted? Shall we, then, allow ourselves to stand convicted of moral cowardice? Shall we refrain to publish these discoveries, because they are new—because they are strange—because they asto-

nish us? Are we not lovers of truth? True, we know little about the matter; but therein consists the incentive to action—therein lies the stimulus to research. Shall man, whose present amount of knowledge may be compared to a grain of sand in the field of immensity, dare to laugh, scorn, and ridicule, the attempts to evolve one of Nature's secrets? The Cerebral Physiologist who does this is a disgrace to the body he is ranked with, because he embraces a philosophy which loudly condemns such a line of conduct. He is not a degree removed from that professor of physiology, and that instructor of youth, who acknowledged there was "something" in Magnetism, but refused to publicly avow his belief, for fear he should lecture to empty benches.

We find, then, that the last facts advanced still support our first axiom, viz., that cerebration is the function of the brain—one of the manifestations of animal life, resulting from a certain peculiar combination of matter—that it is not peculiar to man, but is exhibited in a greater or less degree by all the gradations of animal life. I am the more anxious to strenuously insist on the reception of this axiom, because, on this basis, the science of Cerebral Physiology is elevated. All Cerebral Physiologists should inculcate this view. Let it be once understood, that all the actions and all the thoughts of men are the products of material changes; let education be conducted on this belief, and a new era will dawn—a gross error will be removed, and very soon, all the minor errors, pernicious accompaniments and consequences, will disappear with it. Let no Cerebral Physiologist say his science is purely inductive, and in the same breath speak of "the mind" of man, for he cannot bring forward a single fact to support his position. These two facts cannot be too strongly impressed on the attention of our race:—

1st, That man's actions necessarily result from his organic constitution.

2dly, That man has the power of modelling his organism, so as to produce by a series of combinations, a high moral and intellectual character, or a character decidedly the reverse—in fact, that the existing state of society is his own production, and that he can either exalt or depress it, by attending to, or neglecting, the laws governing his structure.

As one truth prepares the way for the reception of another, so the knowledge of the fact, that the brain is all that is necessary for sustaining man in his position, opens the door to a number of dependent questions and considerations, which are forced on our attention, because they are the necessary sequences of the preceding axiom.

For instance, how much more intelligible and important do the laws of hereditary descent appear !

Man has power over matter ; but to use that power, he must conform to the laws governing matter.

Man has power over himself and his fellow-man ; but to wield that power, he must investigate, ascertain, and conform to the laws presiding over organic life.

Has he done this ? To a limited extent. Man knows this truth, and acts in accordance with it when employed in developing and perfecting other beings ; but as regards himself, the most important consideration, he wilfully neglects the few laws he has discovered, disdainfully turns aside from the innumerable facts daily presented to him, and thus retards the progress of his race. How is this to be explained ? One reason is evident. He has been weighed down by a spiritual philosophy ; he has been taught, and still believes, that he possesses " a mind "—that this presiding principle suggests and proposes modes of action ; in fact, that he is a being of a higher order, in the possession of something besides his organism, the cause of his superiority.

We must keep constantly before us the opinion expressed in the commencement of this Address. We are Natural Philosophers—not bound to reconcile our views with existing notions and opinions, but to state what we conceive to be truth. Man's actions and thoughts are the necessary result of the activity of his cerebral organism ; and the cause of the peculiar form of his cerebral organism, and the resulting modified actions and thoughts, must be sought for in the laws of Hereditary Descent, and the kind of cerebral training adopted. We know from abundant observation, that the brain can be altered in shape ; and if the laws referred to were only followed out in their broad features, society might be remodelled in the course of three or four generations.

High moral and intellectual pre-eminence is now the exception, and not the rule : man could soon reverse the picture. The brain can be improved by judicious training ; and remember, the neglected training of one individual brain may exert an influence over several generations. We would wish to fix our position on this enlarged view ; we would consider this question as philosophers and philanthropists, not as sectarians—not as affecting the individual, but as appertaining to man in the aggregate.

The laws of organic life are like all the other laws man has discovered—invariable. The same causes always produce the same effects.

Observe individuals possessing superior brains—members of Nature's aristocracy. Why do they differ from the greater portion of their race? Compare the distinguishing characteristics, the elevated grandeur, the high moral and intellectual attainments of the one, with the grovelling debasement, the notorious animal exhibitions of the other. What causes have conduced to produce this difference? Have we discovered the cause? Can we apply the knowledge obtained? If we can, who will limit the application? Why may not *the race* ultimately become partakers of the same improved organism?

If we are asked, Has man unlimited power? we answer, We know not his powers; we, therefore, cannot fix limits to his progress. The fact of human progression can be ascertained from history; but the laws of human progression are not understood, and their deduction from the study of materiality not believed. It is too much the custom to underrate man—to speak of his proneness to vice—his innate depravity—his grovelling tendencies, but not of his *inherent power to become virtuous*; to refer to his derelictions from a standard of morality, as so many proofs of a sinful constitution, instead of tracing effects to causes, and becoming convinced that all these manifestations depend on, and are the necessary results of, ignorance, and a total disregard of important physiological truths. It is our duty to insist on this—to cast new light, and thus remove the blindness which perpetuates these views—to teach that man is to be elevated, not by vainly theorizing, not by lukewarm and irresolute speculations, but by adopting vigorous and efficient plans based on the laws governing his organism.

When high moral worth and intellectual superiority shall be the standard, the eminence to which all shall aspire, the ornaments of the present age will be considered the vulgarities of that which is to come. The improved organism, the inevitable result of consulting the natural laws, will give improved tone, and there will be a natural, unstudied gracefulness and simplicity, far more enticing, far more beautiful, than the unnatural, nonsensical perversions alluded to.

Again: How do these views bear on criminal jurisprudence? Our law-makers manufacture laws, and our judges apply them, but both parties are totally ignorant of man's nature. How long will the people of this country submit to the infliction of injustice, to the punishment of diseased individuals, for actions the necessary result of the activity of an imperfect organism, transmitted to them by parents who were allowed to continue enveloped in the grossest ignorance? This will depend on *our*

exertions. We have pointed out the rational mode of proceeding, and we must not cease our endeavours till we succeed in every particular.

The recognised instructors of the people teach that the gift of *mind* is to the foolish as well as the wise, and that according as it is neglected or used, must be the consequences, be they what they may. Believing and inculcating the doctrine, that man has the power of framing his own line of conduct, they take upon themselves to punish man for any dereliction from a certain standard. They punish a being for a certain act, because they are ignorant, and cannot point out the cause of its performance. The means they use to prevent a recurrence, is terror and punishment—if these fail, annihilation. Vengeance can destroy the being, but will never reform him; it can destroy the vitality of cerebral matter, but it will never prevent certain actions resulting from certain combinations.

If this be true regarding the individual, it is equally true as regards the community, and it is foolish and unjust to punish offenders with the hope of deterring others by the example. Surely the occurrences of the last century will prove this. Recall the thousand gibbets, and the thousand specimens of humanity dangling from their centres—the scaffold reeking with human gore—the wheels and the mangled limbs—the galley and its thousand occupants—the jails, and the penal colonies, and all their attendant horrors. Is there less crime, less violence? Is man informed by all this exhibition of animalism what his duties are? Should we subdue a furious lion by destroying daily in its cage one of its own species? To tame this beast we study its nature; to tame man we must follow a similar course. Is not the spot polluted by our executions crowded by an assemblage of organisms similar in many respects to the one we are destroying? The majority of those who attend these exhibitions of brute force require care and attention; the stimulus they there receive is like water to a thirsty man—it is pleasurable, and differs only in degree from the excitement they receive from a bull-fight, or the struggles of the boxing ring. Can we consistently denounce the bloody amusements of the Romans, and refer to them as examples of a barbarous age? If you wish to know the stage of civilization reached by a people, ascertain whether they are obeying the laws governing their organism, whether they have acquired the important knowledge of the connexion between them and their own happiness. Civilization is not to be measured merely by the amount of luxury, by the increased accumulation of comforts, or by the numerous victories achieved by Science, annihilating time and space, and really, in fact, rendering the

whole race members of one community; but the great test of civilization is the progress made by a people in those refinements of social intercourse, resulting from moral and intellectual improvement,—is the extent of the inculcation of those laws and those principles which tend to elevate the many and not the few, which have for their object, and embrace in their fullest scope, every circumstance calculated to impart the greatest amount of happiness and freedom.

As Cerebral Physiologists, we must insist on the application of the principles of our science to the important question of Criminal Legislation; by no other means will it be cleared of its difficulties, and in no other way will those unfortunate beings be properly protected, who are continually rendered amenable to the laws of their country. The rulers of this country have yet to be taught that a man's conduct is the *inevitable result* of his cerebral organism, modified by the *circumstances* which surround him at any stated period.

It is the universal appreciation of this truth, marked in strong and indelible characters on the skull of every human being, which constitutes the power by which the criminal code of this and every other country is to be reformed. It is as irrational to punish a criminal for conduct resulting from an unhealthy brain, as to punish a child labouring under rickets and distorted limbs for falling. Is it optional with the child to possess healthy, well-formed limbs? Think you it is optional with the criminal to be, or not to be, guilty of a crime? The preceding views evidently tend to point out the folly of such an opinion; and having proved that the committal of the crime is not to be attributed to the free-will of the culprit, the next question is, How is the tendency to crime to be removed? In this consideration, what an important position do the laws of Hereditary Descent occupy! Of what value the preceding observations! A boy, with a malformed brain, commits a crime—the law immediately punishes him; but till lately, and now only to a very limited extent, we adopted no plan of arrangement at all calculated to remove the disposition to repeat the offence. How came the boy to possess this brain? To the ignorance of how many generations is it to be attributed? Did society take especial care to educate his parents? Did they know that they possessed a peculiar conformation of brain, which of necessity they must impart to their offspring? No! they were allowed to remain ignorant; they were permitted to bequeath to society a being not only useless, but absolutely dangerous. Eagles never give birth to doves. The juvenile patient, then, with such an organism, and surrounded by cer-

tain external circumstances, is pushed on to the performance of certain actions called criminal, but which, we say, *are symptoms of disease*, and require appropriate treatment.

Now, the boy is sent to jail. There he associates with others like himself, and perhaps a great deal worse. His propensities are roused, his moral powers untrained, his intellect unenlightened. His period of confinement expires, and what becomes of him? He is ejected, seeks out his former companions, and again becomes an adept in vice and every species of profligacy. Is the disease cured? Has confinement diminished the natural tendency to the production of diseased manifestation? If Cerebral Physiology were properly understood, could this one, selected from many abuses, exist another year? An individual possessing an ill-formed or diseased brain, if placed in a situation where the animal passions are allowed to run riot, will never be guided to virtue. The sapling, tended with care, may be made to grow straight, but the old tree, aged in its deformity, alters not. How different would be the effect if the boy, at the moment of his dereliction from a moral standard, were placed in an asylum from which temptation to vice was excluded, and in which the highest moral and intellectual training was administered!

But how numerous, how endless the applications of our science! There is not a subject appertaining to man, either with reference to his present state or future progress, or as regards his formation, his education, or his government, which is not dignified and enriched by the illustration it affords, by the clear and philosophical views it enables us to take of difficult and intricate questions.

Are we not bound to use all our exertions to advance such a cause? Yes! The wedge has been introduced, and it must be driven home. Opinions have been promulgated, and they must be countenanced and enforced. Immense numbers acknowledge the truth of certain principles and axioms, but they are afraid to work them out. In private they applaud certain views and reasons—in public they are cowards, and shrink from the avowal of their opinions. The remark of Plato is still applicable, although ages have intervened—"The eyes of the multitude are not strong enough to look at truth." But this must not continue. If this be true of the mass, let it not be said of Cerebral Physiologists. We must dare be men.

But there are some who laugh at our efforts—who treat our views as chimerical, and our ideas of progression as Utopian. These are the drones of society—these are they who first opposed all attempts at education—who stated, "after all, education is but teaching us to do evil in the best possible

way ;" and now, because the meagre nature of the supply, the miserable pittance dealt forth, prevents the result from becoming immediately apparent, think they are safe in denouncing all who entertain such views as enthusiasts and vulgar zealots. Ye drones ! look to the past history of your race. Do ye not observe that man is a progressive being—that the improbabilities and supposed chimeras of one age, become the facts and scientific truths of the succeeding ; and the limits, if there are limits, to change and progression, men cannot foresee or predict.

Ye drag-chains to social improvement ! it is ignorance that prompts you to declare that man is to remain "degraded," "radically depraved," "desperately wicked,"—that all his labours, let them be ever so Herculean, will not make him a better being, or raise him one degree nearer perfection.

We scout such opinions, and we hail with surpassing joy the promulgation of a sounder philosophy ; we contend that happiness is not incompatible with humanity, but we know that, inasmuch as the arid waste differs from the fertile field, so does man as he is, differ from what he might be.

Our task, then, is to give the means to be adopted, to teach what *is in man*, to insist on the inculcation of this truth—"Man, know thyself—all wisdom centres there ;" and, above all, let each individual of our body be animated by this influence.

———"To thine ownself be true ;
And it must follow as the night the day,
Thou can'st not then be false to any man."*

Mr SIMPSON rose to move a vote of thanks to Dr Engledue for the powerful, eloquent, and, in many respects, instructive Address to which they had just listened. He thought it right, however, to guard his motion. That guard did not relate to the illustration of Phrenology by Mesmerism. He had listened with intense interest to the facts as detailed, on his own experience, by Dr Engledue, in whose good faith and high honour

* Dr Engledue's Address, which our limits have compelled us to condense where abridgement was possible without essential injury to the expression of his views, will be found entire in the 145th Number of the *Medical Times*. From subsequent numbers of the same journal we have copied several other papers included in this article.

When Dr Engledue came to the subject of Mesmerism in his discourse, Mr Donovan rose and protested against the introduction of that subject into the deliberations of the Association, as tending to increase the hostile prejudices, already too strong, under which Phrenology laboured. No one joined in this protest ; and as it was the President's opinion that the interruption was out of order, Mr D. was requested to sit down, which he accordingly did.

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here—they profess not to know, neither do they care, what constitutes his mind in this life. Suppose it brain, and nothing but brain. What, then? It is God's work, and, therefore, the best material of which mind can be made in this world; and it could be only divine power that could make matter think. Be it what it may *here*, if it is destined to immortality hereafter, with which even its being matter here is not inconsistent, the alarm about materialism is the mere bugbear of ignorance, of which a mind at once philosophical and religious will be ashamed; and a bugbear it is held to be by the Scotch Phrenologists. I should be one of the last, said Mr Simpson, to compromise or conceal truth in homage to prejudice; but I would not aggravate existing prejudices by a public declaration of what cannot be shewn *not* to be error; and I do hold it error to assert, without proof, that mind is only an operation of brain called Cerebration. I am equally prepared to protest against the counter-assertion, which I doubt not we shall hear on this occasion, that mind is an immaterial essence. We know not what its nature is, and it does not appear that it concerns us to know. It does concern us to know its future destiny, and that, not depending on its essence here, has been revealed to us. The religious question, therefore, is safe. Dr Engledue's conclusion, although, Mr Simpson humbly thought, unphilosophical, is in no sense dangerous or irreligious; whatever it may, and *will*, be held to be by an uninformed public. It will be seized hold of as a handle against Phrenology, which nothing that is *true* can ever legitimately be. So far Mr Simpson deemed it necessary to explain, if not to qualify, his motion of thanks. There was much admirable, much astonishing, matter in the Address, independent of its positive but unwarranted materialism, for which to thank Dr Engledue. Mr Simpson might add, on the subject of criminal treatment as dealt with in the Address, that Dr E.'s views seemed in no respect to differ from Mr Sampson's, which phrenologists, it is understood, pretty generally hold to be sound. Mr Sampson and Dr Engledue, like the orthodox Calvinists, maintain the necessity of human actions, but not their irresponsibility. They, on the contrary, are advocates of a rigidly invariable responsibility for those acts called crimes, the application of which is itself part of the series of necessities; but it is responsibility to restraint and reformation, not to human vengeance and cruelty. Mr Simpson said, that he therefore did not include in the qualification of his motion, Dr Engledue's views on this point, which had been so eloquently stated. He concluded by moving the thanks of the Association to Dr Engledue, for an Address, which, with

one exception, in his, Mr Simpson's, view of it, was replete with matter of the most interesting and instructive character.

Mr LOGAN seconded the motion.

Mr SERGEANT ADAMS, with considerable warmth, denounced the discourse as of a most dangerous tendency ; and regretted that he had become a member of an association where such a discourse could be delivered. He, for one, could not sit silent and hear mind thus boldly extinguished as a mere error of the imagination, and matter enthroned in its stead.

Mr TULK concurred with Mr Adams. He was not prepared to surrender that thing called Spirit, and with it all the principles which formed the foundation of religion. He was as little prepared to surrender the doctrine of man's responsibility for his actions, by adopting Dr Engledue's views of criminal treatment.

Mr CULL thought the assertion of materialism both unwarrantably and injudiciously made. He expected that it would be eagerly laid hold of by anti-phrenologists and bigots to throw back the science, it is impossible to say how long. Phrenologists,—for no distinctions would be made,—it would be affirmed, have long been suspected of materialism, but they have now thrown off the mask, and avowed it unblushingly. He farther objected to the introduction of Mesmerism for the same reason. It was to associate Phrenology, which has already unpopularity enough of its own, with a still more unpopular subject.

Dr MOORE concurred with Mr Cull.

Mr CHURCHILL took the same view of Mesmerism as Mr Cull. Phrenology had enough to do to maintain its own character with a prejudiced public, and ought to say to Mesmerism, as one lady of rank once said to another whose reputation was more than doubtful, "Madam, I cannot afford to be seen in your company. My own character is barely sufficient for my own wants, it is not enough for us both."

Mr DONOVAN expressed the same opinion as to the introduction of Mesmerism, though not hostile to a fair examination of the subject in its proper place. He moved an amendment (which was not seconded), to the effect, That this Association, whilst it acknowledges with thanks the ability of Dr Engledue's Address, cannot sanction his opinion as to the materiality of mind.

Mr RICHARD BEAMISH adopted Mr Simpson's views. He held every thing not only allowable, but called for, that tends to confirm Phrenology. He would therefore quite as soon have refused to look at Mr Hawkins's new callipers as at Mes-

merism as an instrument for illustrating Phrenology ; and when facts were offered him on the subject, on what principle of sound philosophy should he exclude them, and join in a protest against them ? He would do them justice, strict scrutinizing justice, no doubt ; but he would not shut them out of Court.

Some other speakers concurred in the same view of the Discourse ; while Dr ELLIOTSON, Mr SYMES, and others, saw no reason for any qualification of the vote of thanks. It was, however, distinctly understood, that the vote of thanks did not imply more concurrence in Dr Engledue's opinions than each member acknowledged to himself,—and, a shew of hands being taken, it passed by a large majority.

Mr SIMPSON then read an abstract of a *Case of Homicidal Insanity*, the details of which appear in the *Annales d'Hygiène Publique*, tome xv., première partie, p. 128. The patient, Peter Rivière, aged 20, murdered, in June 1835, his mother, aged 40, sister 15, and brother 8, one after the other, with the same weapon, a hedge-knife, in a fit of maniacal excitement. The minutes of the Criminal Court of Caen, in Normandy, published in the above mentioned journal, embrace the depositions of the witnesses on the trial ; a memoir, by Rivière himself, of his life, and of the working of the various hallucinations which led ultimately to the horrible tragedy which he performed ; with the medical report of his case, bearing the signatures of several of the first names in the profession in France.

Rivière was the son of a small farmer in the district of Annay, in Normandy. There had been insanity in his family. His eccentricity of character was the occasion of great affliction to his relations, and considerable annoyance to the village and neighbourhood in which he lived. He was obstinate, taciturn, and solitary, shunning even the society of his own family. He was without filial affection to his mother, and even entertained against her a fixed and deep-rooted hatred ; he shrunk from contact with her with a phrenzied abhorrence. He was always uneasy in the presence of any female, so much so as to be considered a woman-hater. This arose from one of his most singular hallucinations—that an influence emanated from him which would render any female that came near him a mother without her consciousness ; of which result he often expressed the utmost moral horror, especially when the female was so related to him as to involve incest. He was from his infancy cruel ; as a child he crushed birds be-

tween two stones, and to the last carried a hammer and nails in his pocket, to nail frogs and other animals to trees, which he called crucifixion. He often spoke of the passion of Christ. He pursued children with weapons, threatening them with death; and took much delight in frightening them in various ways, such as holding them over a deep well, and making them believe that he would let them fall in. He rambled and roamed about, often sleeping in old quarries, and subsisting in the woods, for days, upon wild fruits. On his return from these excursions, he avowed that he had seen the devil, and made a paction with him. He talked when alone, made odd noises, and laughed like an imbecile; yet was often apparently proudly exalted, and boasted of his importance and extraordinary destiny. He read heroic books, and identified himself with the heroes described, often going to war with the cabbages in the garden, which he mowed down with a stick, as so many legions of enemies. He remembered exceedingly well what he read. He studied philosophical works; and as some of them were of an infidel tendency, he became irreligious. He next suddenly changed to extravagant devotion and piety, and the catechism of Montpelier, lent him by the curate of Annay, became his study night and day. In this frame of mind he took the Sacrament. On the day he perpetrated the triple homicide, he dressed himself in his Sunday clothes, and when asked by his grandmother what freak he had *now* in view, answered, "You will know ere night." He complained that morning of great uneasiness at the heart. He came unawares upon his victims, and cut their throats. He then came out of the house, and shewing his bloody hands boasted of the deed, saying, "I have delivered my father; now he will be no more unhappy." He left home, carrying the knife with him dropping blood, and wandered in the woods and over the country for a whole month before he delivered himself up, as he ultimately did, to the civil authorities. The witnesses all considered him as an imbecile or madman. He was of small stature, his forehead low and narrow, his black eyebrows formed an arch, his head inclined downwards, and his eyes looked askance, as if he had been afraid to encounter the eyes of any one, for fear of betraying his secret thoughts; while his movements were sudden and rapid, each a bound rather than a step. In his own Memoir, which he composed in prison at the request of the authorities, and which is clear and connected, he describes his impelling motives to the homicidal act, and gives the history of his wanderings for the month immediately after it, and of his surrender to justice. The following is an extract from that singular document:—

"I loved my father much ; his misfortunes touched me ; the dulness in which I saw him plunged, the continued troubles which he endured, all touched me exceedingly ; all my ideas were carried towards these things, and became fixed there. I conceived the frightful project which I have executed ; I thought of it for a month before ; I forgot entirely the principles that should have made me respect my mother, my sister, and my brother. I looked upon my father as being in the power of enraged dogs or barbarians, against whom I should employ arms ; religion forbade such things, but I forgot all its rules ; it seemed to me that God had destined me for that, and that I should execute his justice ; I knew human laws, the laws of the police—I thought myself wiser than they ; I looked upon them as ignoble and shameful. I had read Roman history, and seen that the laws of the Romans gave to the husband the right of life and death over his wife and children. I wished to brave the laws ; it seemed to me that it would be glory for me if I immortalized myself by dying for my father. I figured to myself the warriors that had died for their country and their king ; the valour of the youths of the Polytechnic School at the taking of Paris in 1814. I said to myself, these people died to sustain the part of a man whom they did not know, and who knew as little of them, while I should die for a man who loved me ; the example of Chatillon, who alone maintained to death the passage of a street, by which his enemies were advancing to take his king ; the courage of Eleazar, brother of Maccabee, who killed an elephant on which he thought his enemy the king was, although he knew he might be trampled under foot by this animal ; a Roman general, &c., &c. ; all these things passed through my mind, and incited me to do my deed." Much more of these ravings follows, in which many other historical examples of self-devotion are cited, all as unlike the one meditated by this unhappy young man as it is possible to conceive, till the climax is completed by allusions to the passion of the Saviour, who died for mankind. He thus proceeds :—"When I heard that nearly 50 persons wept when my father sung 'The Holy Water,' I said within myself, If strangers, who are nothing to him, weep, what should not I do who am his son ? I took, then, this frightful resolution, and determined to kill all three ; first the two (his mother and sister), because they combined in making my father suffer. As to the little one (his brother), I had two reasons ; the one, because he loved my mother and my sister ; and the other, because I was afraid that, in killing the two others, although my father should have a great horror for it, he would not regret me, when he knew I had

died for him: I knew that he loved his child—he was intelligent; I thought that he would have such a horror at me that he would rejoice at my death; and that by being exempt from regret, he would live more happy.” Having taken these fatal resolutions, much follows about Jael, Sisera, Judith, and Charlotte Corday; many wanderings, many resolutions to proceed with and to postpone the fatal act which was at last perpetrated. It is thus described by the perpetrator:—“Mid-day came, my brother Jules had returned from school; profiting by this opportunity, I seized the hedge-knife, entered the house of my mother, and committed this frightful crime, commencing with my mother, then my sister and little brother, after that I redoubled my blows; I then went out into the court and spoke to the servant, to take care that my grandfather and grandmother should do themselves no harm, and to tell them that I died to give them peace and tranquillity. I then took the road to Vire, wishing to have the glory of being the first to announce the news; I did not go to the village of Annay for fear of being arrested. I threw my hedge-knife into a field of wheat. As I walked along I found the courage and the idea of glory which had animated me, diminish; and as I went farther on I entirely recovered my reason. ‘Ah! is it possible,’ I said. ‘Monster that I am! unfortunate victims! Is it possible that I have done this? No! it is only a dream! Alas! it is too true! Abyss, open under my feet and swallow me up!’ I wept, I rolled upon the ground, I lay down and looked round upon the different places—the woods; I said, ‘Alas! could I have thought that I should one day have been in this state? Poor mother! poor sister! poor child, who used to go with me to the plough, and was able even to harrow by himself! they will never reappear!’” Rivière goes on to say, that with this return of reason his ideas of self-devotion suffered a material change; he avoided the chance of arrest, and wandered in the woods, subsisting on wild strawberries, and occasionally purchasing bread with a few sous which he had when he ventured into a village near the woods. After a whole month’s wandering, he at last found his way to Vire, and from pure fatigue and exhaustion told his name to a gendarme—was carried before a magistrate, and committed to prison. He formed the resolution, a singular one in his case, to feign madness, or rather imbecility; a resolution, however, which he did not carry out. He was brought to trial, found guilty, and condemned to death. A petition in his favour was presented to the king by the jury on the ground of his unsound mind, supported by a medical report numerously signed, declaring him insane. It is not in the history of

the case before us what was the result of the application for the royal mercy, but we cannot doubt that it must have been successful; it was made for commutation of punishment, still persisting, though in a milder form, in the original absurdity of condemnation in such a case at all. It will at once occur to you, that the jury should have kept the power of saving the life of so very undoubted a lunatic in their own hands. It was the duty of the counsel to urge this upon them; indeed, we cannot read the evidence on the trial without being convinced that the defence of lunacy was pleaded with the object of obtaining a verdict to that effect. It is consoling to find so many medical judges of the case, with Esquirol and Orfila at their head, unhesitatingly pronouncing this poor creature utterly irresponsible. One medical witness throws his knowledge, or rather his ignorance, into the other scale; and I shall quote his opinion, because it is supported by reasons which would have passed for sound, and consigned a lunatic to the gallows even in Britain, no longer than ten years ago. M. Bouchard, summoned and interrogated regarding the sanity of Peter Rivière, replied, "P. R. is *not* insane; and that for two reasons—first, because in studying his physical constitution we find no cause which can have deranged his cerebral functions; and secondly, because his mental state cannot be ranged under any of those classifications adopted by authors: P. R. is not a monomaniac, because he is not delirious upon one subject; he is not a maniac, because he is not in a state of continual agitation; he is not an idiot, since he has written a memoir full of sense; lastly, he is not out of his wits, as is easy to be seen. Therefore, P. R. is not insane." It might be thought that the folly of this notable opinion should have adorned one physician only in the year 1835. Not so, however; the minutes state that four physicians were present; two were of M. Vastel's opinion (for insanity), and two of M. Bouchard's. It was at a subsequent consultation of physicians in Paris, who had not been examined at the trial, that by a unanimous report on his case P. R. was declared insane. We have not the advantage of seeing this homicidal maniac's head; but we can easily believe that it will exhibit a large and unbalanced Destructiveness and Secretiveness. This development, added to his eccentric manifestations and his constitutional cruelty, the case being yet further strengthened by his hereditary taint, should have brought his case to a consultation long before he arrived at the stage of shedding human blood. His bird-crushings and frog-crucifixions should have consigned him to treatment in an asylum for his own sake as well as for the public safety, years before his last tragedy. An experienced physician of

the insane would have declared it quite as dangerous to have him at large before as after that act. His case, in its general character, belongs to a class—that of the Howisons and Legeres, and others described in the pages of the *Phrenological Journal*. Rivière's reading excited him to shed blood. It is such subjects as he that should never hear of or see blood shed. Presence at an execution, or other cruel punishment, would have roused him to commit some dreadful act. Like Howison, Rivière endeavoured to elude justice, and resolved, if in its hands, to deceive it. The return of self-possession—for temporary only it would have been—will from these and many other cases be found to be so usual as to be of the character of a natural reaction, rather confirming than weakening the force of the other proofs of insanity; while his conduct subsequently to the fatal act, which, when profound ignorance on the subject of insanity prevailed, would have been called "method in his madness," a phrase which has sent many a lunatic to execution, would only increase the decision with which the really skilful and informed would declare him fit only for the constraint and care of a properly-governed lunatic asylum.

Tuesday, 21st June, half-past Seven o'Clock, P.M.—Dr Moore in the Chair.—Mr CULL read a letter addressed to Mr Bryan Donkin, by Mr William Stark of Norwich, communicating a *Case of disturbed Function of the Organ of Language*, occasioned by the rupture of a blood-vessel within the orbit, and, apparently, consequent pressure of the distended eyeball on the cerebral organ, which is separated from the eye by a very thin plate of bone. "My friend B. H. Norgate, Esq.," says Mr Stark, "an eminent surgeon of this place, in the month of March 1841, kindly took me to a patient upon whom he was in attendance, to see an affection of the brain, which he thought worthy the observation of phrenologists. As it was a case totally different from any thing I had seen before, and as he had been professionally interested in it from the time the symptoms of disease in the brain first appeared, I requested him to furnish me with every particular respecting it. He very obligingly consented to this, and allows me to make whatever use of his communication I may think proper. He says, 'On Wednesday, March 11. 1841, Sarah Haze, *æt.* 29, a slender woman, in good general health, being in the last stage of pregnancy, was attacked with an acute lancinating pain in the left side of the head and temple, which extended deep into the orbit. The palpebra soon became swelled, and she experienced a throbbing and constant 'boiling,' as she expressed it, just above the brow. At five

o'clock the following morning, with very little effort, and before the midwife could arrive, she was delivered of a well-formed child. I saw her a few hours after she was confined, and perceived that the conjunctiva of the lids of the left eye was much infiltrated with serum; the pain and distension, caused by pressure on the globe, became almost intolerable, and she was constantly mourning with agony. It became quite evident that some large vessel at the back of the orbit had been ruptured, and was producing the pressure. Leeches were plentifully applied to the part, and afterwards cold evaporating lotions were constantly employed. In the evening of the same day, I found the eye protruding and nearly immovable, and first noticed a remarkable hesitation in answering questions, which was quite unusual with her; although perfectly conscious, she occasionally made use of one word for another, mistook letters, or dropped syllables in the articulation of words. On Friday the eye-ball was more perfectly fixed, her agony extreme, and though the cornea was clear, the retina was amaurotic, the iris quite insensible to light, and, of course, vision was lost. On this day she confused her words so much as to be quite unintelligible to those around her; she still made great efforts to render herself understood, by signs that she wrote down on a slate. On Saturday there was a distinct line of slough in the transverse diameter of the lower section of the cornea. I applied a large blister to the nape of the neck, fomented the eye (which had every indication of bursting) with poppy-head decoction, scarified the conjunctiva of the upper and under lids freely, and obtained full evacuations from the bowels; by these means, I found the next morning, Sunday, that there was a little relaxation of the pressure, and that the globe was less distended; the outer layer of the cornea sloughed, but the contents of the globe did not escape. *Her power of expressing herself evidently improved from this date, and in TWO DAYS more she could articulate perfectly; and I found that, in proportion as absorption proceeded, did her power of expressing herself improve.* She told me afterwards that she comprehended every thing that was said to her during the period that she had so much difficulty of articulating. Vision of the affected eye was entirely destroyed."

Mr SAMUEL SOLLY illustrated the structure of the human brain by a series of beautiful diagrams, and demonstrated its anatomy by dissecting a brain which had been preserved in spirit. He took occasion to disavow participation in the opinions expressed by Dr Engledue in his Introductory Address, respecting the non-existence of mind; adding, that,

as a well-wisher of Phrenology, he could not but regret that such doctrines had been promulgated. This, and sundry statements of Mr Solly respecting the functions of the brain, called forth some remarks from Dr ENGLENDUE, who accused him of inconsistency.—Dr ELLIOTSON repeated his assent to the whole of the opinions expressed in Dr Engle-due's Discourse. He complimented Mr Solly for having introduced Phrenology into the anatomical and physiological department of the School of St Thomas's Hospital, which he himself had left in 1834, without seeing Phrenology introduced.—Upon this Mr STREETER remarked, that although it was not introduced in Dr Elliotson's time, yet he had frequently talked in St Thomas's Hospital with Mr Solly upon Phrenology, before Dr Elliotson's resignation; so that if it was not introduced, still it was finding its way into the school.—Dr ELLIOTSON expressed his utter inability to divine what Mr Streeter meant by half denying his statement; for if it were finding its way in before Dr Elliotson's resignation, it certainly had not found its way, as Mr Solly never taught it, often smiled at it, and many more than one teacher opposed it before the pupils. As to its beginning to find its way, added Dr Elliotson, "I invariably taught the truth of Phrenology, gave a sketch of it, and considered insanity phrenologically, in my lectures in the Hospital, from the first season I lectured there in 1826. In the year 1817, when I was appointed physician to the Hospital, I defended Phrenology in the 'Annals of Medicine and Surgery;' and in 1820, in the third edition of my Translation of 'Blumenbach's Physiology.'"

Wednesday, 22d June, half-past One o' Clock, P. M.—Charles A. Tulk, Esq., F. R. S., in the Chair.—Dr J. P. BROWNE read a paper *On the Organ of Hope*; and Mr DEVILLE illustrated the *Correspondence between the Forms, Sizes, and Proportions of the Brain, and both the Inside and Outside of the Skull*, by a series of casts, which were taken by him at the suggestion of Drs Gall and Spurzheim, by whom notes of the diseased specimens were in part supplied to Mr Deville. We regret our inability to give a report of these two papers at present.

Mr HAWKINS exhibited his new and ingenious instrument for taking the dimensions of the head. It consists of three branches, two of which form the ordinary callipers, but with the addition of a screw, which can be so adjusted as to allow of the instrument being opened (and thus removed from any region of the head, after adjusting it to the width of the part), and of the branches being returned to the precise spot, thus enabling the operator to ascertain the precise breadth, by laying

the callipers on a rule. The third branch, which opens at a right angle with the other two, is provided with a similar adjusting screw for measuring the depth from any spot in the mesial line to any part of the sides of the head,—to the external meatus, for example,—by placing the two balls at the extremities of the callipers in the external openings of the ears, then bringing the ball of the third branch to the spot whose measurement is required, and, after adjusting the screws, taking off the instrument and laying it upon a rule graduated for the purpose. The instrument is extremely simple in its application, and can be folded into a very small compass. Mr Hawkins stated that it had taken him 27 years to bring it to its present state of perfection; but it would be unnecessary for him to point out the successive improvements he had effected upon the old modes of ascertaining various measurements of the head, as he had described them at the last session of the Association.

Thursday, 23d June, half-past Seven o'Clock, P.M.—H. B. Churchill, Esq., in the Chair.—Mr ATKINSON read a paper *On Mesmero-Phrenology*, the facts of which doctrine, said he, consist chiefly in the power of throwing persons of peculiar constitution with regard to nervous susceptibility, into a state of somnambulism or sleep-waking; and in such condition, of exciting or paralyzing the different cerebral organs at will. There are several ways in which this may be effected, depending much on the peculiarities of the individual case; for the effects of mesmerism, of course, like all other effects, although traceable to general laws, are yet modified according to the conditions of the particular instance. One case will only resemble imperfect sleep; another will appear a completely altered state of existence: in one case you may have attraction to the mesmeriser, which in another instance may be wanting; one patient may exhibit clairvoyance, and not ultra-vision; the next ultra-vision, and not clairvoyance; and so on with regard to all the other phenomena. But, nevertheless, there is a general uniformity running through the whole; the cases may be classified, and many of the most essential conditions observed. But it is not necessary to explain further on this head; it is sufficient if I describe the general bearing of the subject, and my individual conviction of the fact,—not so much with the idea of convincing, as of inducing others to follow out the inquiry for themselves. In ordinary cases, there are several methods of exciting the organs, all of which I have practised with success. You may touch or press upon the organs, and observe the natural language which may be exhibited, together with the exclamations which may accompany this; or you may en-

gage the patients in conversation, by which means you may lead the mind at will—they will follow, with their hand pressing on the excited part,—and they will press the more firmly according to the degree of excitement in the organ ; covering one or several, and taking the other hand, if they are not able to reach to a distant part excited in combination. This they will often do of themselves, or if once induced to do so, may continue the habit. A third method is to touch an organ, and ask for an explanation of the power which is manifested there ; or you may picture any particular sense, and request to be shewn where such is felt to be located, or require the analysis of any sensation, and by what combination it is produced, or if it be a simple power. In some cases, you may demesmerise organs, and thus bring them into action ; or you may paralyze any particular power which may be acting. Music is another means which may be used ; and many other methods of inquiry will, doubtless, suggest themselves to those engaged in these experiments. If any organs are much excited, they will no longer manifest their function with any distinctness and energy ; the patient will complain of headache, and a strained sensation in those parts, and a desire to rest. You may excite the organs only on one side of the brain, and when they are becoming confused, you may continue the same feelings on the other side with renewed energy, just as you may tire one arm and then use the other. You may leave the patient in a talking dream, and observe how thought suggests thought, and feeling connects with feeling, how the organs become fatigued, and others become excited for relief ; just as we change from one constrained position to another—perhaps the opposite—for relief. You may watch the effect of any single organ, and how it is modified when acting in combination ; and observe the changes in natural language ; all this was strongly exhibited in a case which I have had of a young lady, who exhibited clairvoyance in the most perfect manner. After playing at whist for half-an-hour, seeing the cards as distinctly as any of us in our natural state, with our eyes open (her eyes were always quite closed, and it made her see more distinctly to cover the eyes with the hand, and press them firmly), she would become fatigued, and complain of pain in those parts which had been employed. In fact, we are hardly able at present to point out any limit to the information which may be obtained in these cases. I have now stated, as briefly as I am able, the nature of those discoveries which I hold to be so important, and I am happy to know that there are some enlightened and fair-dealing men amongst us, who are disposed to pursue the subject ; and I hope that phrenologists generally will feel the immeasurable importance of the question, so far

as to lend their assistance in every possible way to further the inquiry. I have now had four very complete cases of mesmero-phrenology, and others exhibiting partial effects, but which become important when considered in reference to others. Mr Gardiner has kindly afforded me an opportunity of seeing the patient whom he has experimented upon with such success in the Isle of Wight; a case which exhibits some of the highest phenomena of mesmerism, and was the first which exhibited mesmero-phrenology in this country. I have also seen two other cases through the kindness of Dr Elliotson, both exceedingly interesting as far as they go, and which I hope will not be lost sight of. But it is essential that all who really desire truth, should consider well the objections which might be raised against any experiments which they are carrying out; and believe me, gentlemen, that I am as anxious as any of you to bring forward any such objections, and to shew them in the strongest light, that they may have their full weight and consideration, and be the better and the more completely answered—for truth is my only object—I have no other interest in the question; nor have I any love for the marvellous. I desire to reduce marvels into plain things, and not to inflate plain things into marvels. My experiments have mostly been performed before intelligent phrenologists and other scientific persons, and I have not yet heard any sufficient objection to what has been shewn. Those who are engaged in the same pursuit, know that I have been anxious to seek out objections, and I shall now be the first to welcome any new light which shall shew me that I have been in error. But no one can be thoroughly convinced of the truth of these discoveries, who will not observe and reflect and inquire for themselves; and it is much easier to *deny* the truth of any position than to analyse justly its real bearing and claim to consideration.*

Some discussion followed the reading of Mr Atkinson's paper; in the course of which Mr HITCHKIN, Dr MOORE, and others, expressed their dissent from his opinions.

Friday, 24th June, half-past One o'Clock, P. M.—Charles A. Tulk, Esq., F. R. S., in the Chair.—Mr CULL read a *Case of Defective Musical Perception* in a young lady, illustrated by a cast of her forehead. He began by remarking, that the organs of Music and Destructiveness are those on which we are much interrogated by non-phrenologists. The anxiety

* In the above report we have been unable to include Mr Atkinson's answer to certain objections, and his account of a remarkable case which had recently fallen under his observation.—ED.

to have a phrenologist's judgment that the organ of Destructiveness is small, is equalled, perhaps, only by the anxiety to have his decision that the organ of Music is large, and persons commonly think themselves able to judge of music, as they deem themselves without a tendency to violence. Indeed, the phrenologist's patience is often tested by idle questions concerning both those organs. In order to make observations on the organ of Music, Gall remarks, that "it is necessary to avoid confounding those persons who, from practice, have much facility to play an instrument, with the real musician. Frequently," he continues, "am I told, with an air, that I ought to find the organ of Music well developed in certain persons, especially in certain ladies, whom I find manifest nothing but a habit of execution. Such persons betray themselves by the character of their performance, which is more the work of their fingers than of their minds. Their physiognomy expresses nothing of that abandonment, that rapture, which penetrates the entire soul of the true musician." (Gall, *Sur le Cerveau*, 8vo edit., tome v. p. 112.)

After hearing music (proceeded Mr Cull), we are frequently asked if the performer have not a large organ of Music. A mere rapid movement of the fingers over a pianoforte is often mistaken for excellent music:—A sustained note in the falsetto voice, with great and violent changes of vocal loudness, is often mistaken for excellent singing. And when a phrenologist estimates the organ in such musicians to be but moderately developed, his estimate is at once declared to be erroneous, or the science is scoffed at as at least uncertain by the musician's applauding friends.

It must, however, be admitted, that numerous and great errors have been committed by good phrenologists in estimating this organ's development, especially under circumstances similar to those just named. Some of these errors, as might be expected, are traceable to the incapacity of the phrenologist to judge of the music which he has heard, and to the natural tendency of the mind to make observations accord with previous opinions. This tendency of the mind is not easily detected; it is less easily resisted; and phrenologists, like other men, are liable to have their judgments warped by it.

Phrenology, as the science of mind, is in relation with every science and art; but it does not thence follow that a knowledge of phrenology *of itself* confers a power to judge of each science and art;—that power, we know, depends on the possession of the appropriate development of the required organs properly educated. Many persons seem to think that phrenology either is a substitute for universal knowledge, or that it confers universal knowledge; for phrenologists are interro-

gated on all things,—on the emotions, the passions, on innumerable combinations of feeling, on the faculties necessary to this or that conduct, to the acquisition of knowledge, and to the investigation of truth in the several sciences, and to the practice of the several arts. Now, to avoid being misled by this flattering ascription of universal knowledge, and to avoid misleading others, let us freely avow, that we do not possess such extensive knowledge and judgment. Gall remarks on the organ of Colour in relation to the art of painting, that to make complete treatises on the several organs, he should require universal knowledge, which he declares to be an impossible acquisition: then, after quoting an authority on art, he frankly confesses that he himself is neither an artist nor even a connoisseur in art. (Tome v. p. 88.) Let us each study our own heads and minds, and accurately estimate our knowledge, in one word, *know ourselves*, and then, following the example of Gall, let us be humble and cautious inquirers, and not presumptuous judges of what we do not understand; thus, if we are incapable to judge of music, let us not venture an opinion as if we were musicians as well as phrenologists.

It may be asked, Should those phrenologists, then, whose organ of Music is below medium, and those who are unacquainted with music as a science and art, decline to judge of the organ of Music? By no means; but they should state their own condition in regard to the science and art, in order that their judgment may be taken as a simple fact of the organ's development apart from its actual musical manifestations. And then, with regard to the amount and quality of those manifestations, they must depend on the authority of competent judges. Thus, a non-musical phrenologist can estimate the well-developed organ in Malibran and Neukomm as one fact; and although *he* may be unable to judge of their musical talents, he can refer to the high opinion which musicians and connoisseurs of reputation, besides the public voice, express of their talents, as the corresponding fact of which he is in search.

This is the cast of the forehead of a lady of very defective musical perception. The organ of Constructiveness is very large, that of Music is very small. Miss L. H. is about 30 years of age. She cannot distinguish one simple melody from another. She declares all music to be alike. In testing her perception, I with one hand played "*God save the Queen*" on the pianoforte, and requesting her attention, asked her what it was, but she was unable to recognise it as anything she before had heard. The object of playing with only one hand, was to preserve the melody as distinct as possible. "*Robin Adair*" was next played, still with one hand, and she thought

it a repetition of "*God save the Queen*." The latter melody was again played, and immediately followed by the other national melody, "*Rule Britannia*," but she could perceive no difference between them. "*God save the Queen*" was again tried, followed by "*Maggie Lauder*," but she perceived no difference between them. Many experiments were tried on several occasions with similar results. She has been to the opera and likes theatricals, but the music of all operas is alike to her—she can perceive no difference. Handel, Mozart, Beethoven, and Rossini, have lived in vain for her. I tested her in the scales, and explained the construction of the octave to her; then, after accustoming her ear to the succession of sounds of the octave, I purposely threw the semitones out of their places, but she did not perceive it.

She accurately perceives the distinctions of loudness of sound, as tested on the piano, and in everyday life by correctly estimating the distance of common noises. She accurately perceives the distinctions of quality of sound, as tested in distinguishing one musical instrument's sound from another, and in referring ordinary noises to their true causes. She accurately perceives the distinctions of duration of sound, and dances in good time. Thus she perceives all the distinctions of sound except those of pitch.

As several well-informed phrenologists have erroneously estimated the organ's development in this lady's cast, I will venture to suggest its mode of study. 1. Examine the state of integument over the organ. 2. Examine the organ by a front view of the face; then, 3. By a profile view. 4. Then examine the angle of the forehead, by looking from the corner of the eyebrow upwards, and finally looking downwards on the angle. In examining this organ, it is well to move the head so as to obtain various effects of light and shadow on the angle of the forehead. I shall not occupy your time further than to state, that this remarkable case is fully in accordance with the views which I have put forth in some late volumes of the *Phrenological Journal*.

Mr SIMPSON delivered an extemporaneous address on the *Proofs of the Existence of God, afforded by the Adaptation of the Mental Faculties of Man to his Condition in Creation*. Disclaiming all pretensions to authorship on a theme that would require a second Paley guided by the light of Phrenology, he would only venture a few hints in a *viva voce* sketch. After offering some examples of the proofs of design observable in the adaptation of the bodily parts to their various uses, and to the laws of material creation; and noticing the well-known atheistical theory, called the atomic, which

sees in these adaptations only certain conditions of being, which, by a necessary arrangement of atoms, could not be otherwise; Mr S. proceeded to argue, that even were it possible to imagine such a mode of being in the bodily organs, the faculties of the mind excluded all rational idea of fortuitous origin. For the fulfilment of the purposes of man's being, it was necessary that he should be endowed with impulses to act and powers to think, of a determinate and permanent character, each as recognisable as his sight or hearing. Phrenology has demonstrated such determinate faculties in man, each faculty acting by a portion of brain quite as palpable as the eye or the ear. In other words; as determinately and distinctively as man sees and hears, he reproduces his like, cherishes his young, settles in his abode, associates with his kind, repels attack, kills for food, appropriates, fashions, &c. Such organs of the brain, Mr S. remarked, as are related to each other, are arranged in groups. He described the faculties whose organs form the *Domestic group*, and asked, as he went along, if we could believe that the exquisite adaptation of each faculty to its purpose, and the pleasure and happiness which benevolent design has connected with its exercise, are results that could have come out of a process like crystallization, a self-arranging, chemical, power of things? He dwelt particularly upon that combination of feelings which *permanently* unites the sexes, and secures parental care for helpless infancy; Could these, he asked, be mere chemical affinities? After touching more slightly upon the other organs of the domestic group, and pointing out the beautiful and benignly-intended adaptation of each, with their combined production of that concentration of human happiness, "Home," the speaker proceeded to shew the adaptation, to man's condition, of the faculties forming what he termed the *Self-preserved group*—Alimentiveness, Combativeness, Destructiveness, Secretiveness, Acquisitiveness, Constructiveness, Cautiousness; and next the adaptation, to man's relation to his fellows, of the *Character-preserved group*—Self-Esteem and Love of Approbation. He then paused to view man at this stage of his mental composition, and for a moment supposed that the higher endowment of moral faculties had not been superadded. The impulses already enumerated, all excellently adapted to their purposes when controlled by higher faculties, would, if not so restrained, have manifested themselves only in abuse; and man would have been a selfish, sensual, violent, cruel, rapacious, cunning, vain, proud, savage. The law in his members would have been the law of the brute. But there is a law in his mind—Justice, Benevolence, and Temperance—these form the *Moral group* in the human mind, and give us an obvious

and easy ethics or moral standard, which Scripture comprises in these memorable words, "to do justly, to love mercy, and to walk humbly with God." Mr S. expatiated on these humanity-exalting principles. In Benevolence, he said, by itself, he saw the direct impress of Deity—the "Image" in all its radiance; a proof irresistible that God is, and that God is Love;—he saw that Mercy which is over all God's other works reflected in His favoured creature, "twice blessed, blessing him that gives and him that takes;"—that Charity which "suffereth long and is kind;"—that Gentleness which "doth more enforce than force moveth to gentleness;"—that Meekness which, while conquerors, from Sesostris to Napoleon, have, each for his dark hour, clutched, ravaged, and lost, "shall inherit, the earth." When, he added, we are blessing and blessed in the domestic circle, when greeted on our threshold with "the music of kind voices and the heaven of kind looks,"—smiles these which no wealth can purchase, no state compensate,—can we admit for a moment the belief that these heaven-derived feelings which give the joys of home, and impart to private life its "quiet majesty," could come of a mere energy in atoms; that this could form the fountain of such living waters? It cannot be. The finger of God is here. Design, and that design benignant, is graven on the front of the sublime fabric by its Architect. His Name is there in characters of light. "He that planted the ear," demands the Psalmist, almost in syllogism as well as exquisite poetry,—“He that planted the ear, shall He not hear? He that formed the eye, shall He not see? He that teacheth man knowledge, shall He not know?” And He, let us add, that sent Mercy, Gentleness, Charity, Meekness, on wings of Love to find their home in the bosom of Man—is He not the existing, the benevolent God? Can there, from such premises, be drawn any other conclusion? Mr S. proceeded to reason, at some length, from the *Religious group* of Man's faculties,—Wonder, Veneration, Ideality, Hope,—and a glorious group, said he, they are; lifting man to "heaven's gates," and surrounding him with a halo which God alone could shed on human head;—a constellation of divinest workmanship, for the unconscious orbs of space are as nothing when compared with it. He then directed the attention of his audience to the cluster of organs which he called the *Recreative group* of Man's faculties—Ideality, Wonder,* Imitation, Wit, Tune, and Time. These faculties are an *added* gift of God, bestowed on Man for his hours of recreative enjoyment; and they do afford glorious means for that benevolent

* The same faculty may be classed in more than one group.

end. They are fitted for a world exuberant with their proper joys,—full of poetry, beauty, and beauty's reflex, art; endless in wonders, gay with mirth and laughter, song and dance, grace and melody, "all beauty to the eye, and music to the ear," lavished, and lavished gratuitously,—for all this extra beneficence, as it may be called, might have been withheld, and man been grave but never gay,—to make him happy with purer joys than those of sense and sensuality. Phrenology brings out this truth in instructive relief, shewing how these faculties combine to produce refined and elegant pleasure. To illustrate, but not limit, their application, let us only look at the scope of the entertainments of the theatre: there these faculties are all appealed to; various, no doubt, the modes, but essentially and ultimately the theatre exists by purveying for Ideality, Wonder, Imitation, Wit, Tune, and Time. Laughter itself is the gift of God. How sadly to mistake his design, then, to inculcate gloom,—his character, to clothe him with terrors! An innocent child said that which ought to silence the gloomy ascetic for ever, when, admiring a nosegay, it asked, "Mamma, did the *cheerful* God send these beautiful flowers?" Yes! "the cheerful God" sends all the flowers that garland life. He it is who, by planting an organ of Tune in man's brain, and a relative instrument of music of surpassing excellence in man's throat, hath said to him, "Sing!"—by conferring on him an organ which gives vivid perception and enjoyment of measured time, or rhythm, prompting to graceful movement, in some with an energy beyond control, hath said to man, "Dance!"—by enriching his mind with Ideality, and clothing the lily with glory to delight it, hath said to man, "Adorn!"—while, by constituting a distinctive faculty to perceive, enjoy, and even create, the endless combinations of incongruity, from which we draw, not suffering, but enjoyment, he hath said to man, as plainly as if he had written it with his own light on the sky, "Laugh and be happy!"* Scenic personation, pictorial similitude, the mimic canvass, the breathing marble, are all one beautiful family the offspring of Imitation; and were all *willed*, when that faculty was constituted part of man. "I could linger long," continued the speaker, "in this happy field of moral speculation. It is an effort to quit the thought that beauty, in its infinite varieties of grace, elegance, adornment, splendour, expression, is of God;—beauty in 'day and the sweet approach of even and morn;' beauty in 'vernal bloom and summer's rose;' beauty in 'flocks and herds;'

* The song, the measured timbrel, the dance, the cheerful voice, laughter 'self, are all extolled by the Psalmist as modes of praise; and jewels, ornaments, beautiful garments, as objects of legitimate desire by Isaiah.

beauty—oh! what beauty!—in ‘human face divine!’ Nature is gorgeous with beauty, and God fitted man by his Ideality to revel in its luxury. For man it had else existed in vain. In a word, the truth stands revealed, that while a benevolent God called into existence a beautiful world, he created man the happy witness of his handiwork. There were enough, I am almost tempted to say, in God’s graver, more every-day mercies and bounties,—for terms are not easily found for the distinction,—to attract the gratitude and love of his favoured creature man; enough in food, and air, and labour, and sleep, and health; enough in the joys of virtuous love, and of infant-cherishing; enough, and more than enough, in truth, and gentleness, and brother’s love; enough in thrilling piety and filial prayer: but when we look yet beyond, and see that the stream still flows onwards, from the depths of these substantial blessings, and sparkles in the region of gaiety and mirth, of poetry and pastime, that God is indeed the ‘cheerful God,’ our venerative love restrained by awe and not unmingled with fear, seems to assume a more confiding, a more child-like character, and to become, in very deed, the love of the whole heart, and soul, and mind. Can that love be felt, and the existence of its object be doubted?”

Time would not permit Mr S. to do any thing like justice to the subject of the adaptation of the intellectual faculties to their objects, the qualities and relations of things; but he could venture to affirm, that the more this wide field is investigated, the nearer we approach to a complete metaphysics of our science,—the more perfect shall we find that adaptation, the more obvious design, the more demonstrable an All-wise Designer. If, when the light, now thrown on man’s exalted nature by a philosophy then unknown, was veiled to Shakspeare, he yet exclaimed, “What a piece of work is man! How noble in reason! How infinite in faculties! In form and moving, how express and admirable! In action, how like an angel! In apprehension, how like a god!” what would he have said now? But what, above all, would he have said to the atheist, who had averred in his presence that all which called forth that immortal rapture is but a fortuitous concurrence of atoms—a creature without a Creator? Mr Simpson then referred to a treatise by Sir George Mackenzie for an able argument for the *continued* existence of God, founded upon the fact that Veneration and Hope are *existing* faculties of the human mind; while without God’s continued being, these would have been superfluities in our constitution; and concluded his discourse, which occupied about two hours, and of which we have given only a specimen, by ob-

serving, that admirable as is the body, in its structure, functions, and adaptations, the mind, as analyzed by true science, infinitely transcends it, and offers yet more noon-day proofs that God is, and that He is powerful, wise, and good. The sphere-peopled empire of gravitation, in all its vastness and magnificence, does not utterly exclude our fancying, however far from admitting, a self-arranging energy; the phenomena of the chemical and mechanical world, may, we can imagine, but imagine only, have the same origin; nay more, a wide stretched hypothesis may conceive plants, and a wider yet, animals, necessarily assuming forms which must perform certain functions; but **THOUGHT** and **FEELING**, with their adaptations—**MIND**, with its relations,—resist all visions of chance-formation or atomic self-arrangement; visions which would reduce reason itself to an absurdity. Mind, then, is the work of design, and demonstrates a Designer. But design in a part is design in the whole; design in mind demonstrates design in entire creation, in its series of animal bodies, organized plants, chemical and mechanical things, planets whirled in space, suns poised in infinity, telescopic firmaments of “star-dust,” mocking all measurement, all calculation; in a word, declares all, outwards in material nature, and inwards in the mind of man, to be one harmonious whole—one ineffably vast **DESIGN**.

Saturday, 25th June, half-past 7 o’ Clock P.M.—Richard Bea-mish, Esq. F.R.S., in the Chair.—Dr **GEORGE JAMES DAVEY** read a paper on *Insanity in connection with Phrenology*. Before, said he, we can comprehend rightly the nature and characteristics of diseased cerebration, a correct knowledge of the healthy function of the brain is indispensable. To the general ignorance of Phrenology—in other words, of cerebral physiology—are to be attributed the erroneous views, not only of the public, but of medical men, concerning insanity, and the unscientific and barbarous manner in which the disease has been treated. Under these circumstances, we cannot be surprised at either the number of incurable lunatics, or the long duration of the treatment to which the curable are too generally subjected. The integrity of cerebration implies not only a healthy brain, but also such a nice balance of the cerebral organs as will, under ordinary circumstances at least, enable the individual to preserve his conduct and inclinations in harmony with the usages of social life. The former position every one will admit, as readily as he will consider a morbid change of any other organ,—the liver or lungs, for example,—to be the cause of functional disturbance. Numberless are the miseries which

have resulted to the lunatic from his malady having been regarded apart from a morbid condition of a material organ—as a peculiar irregularity of some spiritual essence which has been supposed to pervade his organism. Under the influence of this notion, all sound principles of treatment were neglected. To the Spiritualists have succeeded the Materialists, who, in advocating the dependence of *mind*, hitherto so called, on cerebral organization, have effected no slight good, by developing a principle by which they have been enabled to demonstrate the all-important truths of Phrenology, and promulgate sound views on the nature and treatment of insanity. Hence the lunatic is no longer regarded as merely a furious and malignant animal. Knowledge of the healthy function of the brain has made the pathologist understand how the numerous modifications of insanity are not less necessarily the result of cerebral organism, than are the varieties of feeling, thought, and inclination we witness in every-day life. Again, in all departments of nature, we witness a reciprocal dependency, a well-balanced and harmonious relationship of individual parts: thus, in a healthy man, one whose bodily functions are duly executed, we have evidences of an organism whose parts are as perfectly balanced, as harmoniously arranged and reciprocally dependent, as the parts of a complicated machine. Just as, in a piece of machinery, disturbance in the adaptation of any of its parts is followed by irregularity of action throughout the whole; so, whatever interferes with the healthy performance of the nervous, nutritive, or respiratory functions, must proportionately derange the remainder. Now, what the nervous, the nutritive, and the muscular systems are to each other, as the component parts of the body considered as a whole, so are the individual parts of the entire brain to each other, considered collectively—to the whole cerebrum. Insanity, or abnormal cerebration, is thus seen to hold the same relation to part or parts of the brain, that indigestion does to the stomach, or consumption to the lungs. In the medical treatment and general management of the insane, it ought ever to be a guiding principle, that the brain, being a congeries of organs, executes a plurality of functions, every one of which may be variously modified in the same individual, and within a very short time. This most important fact is the very basis of the non-restraint system, which is widely exciting the attention of the scientific and humane. Phrenology exposes the ignorance and mischievous consequences of belief in the lunatic's insensibility to acts of attention and kindness. It is only by balancing the general integrity of his sentiments and kindly sympathies with the excited and diseased animalism

which preys upon him, that his attention can be gained, and his esteem and confidence secured; by this means only can the most suitable remedies be sought out and efficiently applied. Two or three weeks since, a young woman (M. C.) was admitted into Hanwell, closely restrained with a strait-waistcoat; she was reported "violent and dangerous." The examination of the cranium revealed a very good development; the superior and anterior regions were full; she did not complain of local pain in the region of the propensities, neither was there the slightest increase of temperature; Dr Davey therefore regarded the case as one of pure hysterical irritation of the cerebral mass. Being kindly received, and all forms of mechanical restraint immediately removed, she became convinced of the benevolent intentions of those around her, and quickly responded to the call thus made on her better feelings. The effect was almost electrical; in three or four days she was convalescent, and became employed in some domestic occupation in the establishment. She will, ere long, be discharged. Dr D. here took occasion to mention that he had frequently witnessed, among his patients at Hanwell, indications of a particular abnormal cerebration, which forcibly reminded him of the specific and healthy characteristics of animals lower in the scale of organisation; but on this subject he could not enter into detail. He added, that, being much in the habit of analyzing insanity with the aid of the external manifestations of it which the speech and actions of the lunatic supply, he had thought that, to obtain the most correct perception of the real state of the brain, it is only necessary to recur to the state of dreaming. If we watch (said he) a lunatic patient, and mark well his gesticulations and character of conversation, we shall perceive very much of what I would regard as a state of *active dreaming*; that is to say, a condition which would seem to realize *action with unconscious thought*; and in which we perceive evidences of functional power, though deranged, of most, if not all the cerebral organs. An insane person often reminds me of one asleep and dreaming with his eyes open, and in the exercise of his motive powers. I believe it is only during comparatively *sound sleep* that one or two only of the many cerebral organs remain in a state of activity, the remainder being in a state of repose; and that during sleep less sound, dreaming rather consists in a negative state of repose, so to speak, of the whole brain. In really sound sleep, of course the cerebral mass is no less entirely inactive than the muscular powers. I mention this, in order to make you understand what I conceive to be the real condition of the brain of the lunatic generally. I will add, the dreamer with one or two organs alone active,



I should be disposed to consider as a sleeping monomaniac ; and another, with the cerebral organs in a condition which I have described, as a "*negative state of repose*," may be not inaptly compared to the patient whose insanity is marked by incoherence. As a sample of this form of disease, Dr Davey read notes of the incoherent talk of two patients, indicating a condition of cerebation where most or all of the organs of the brain, having lost their controlling power as in sleep, are acting so spontaneously, that one is almost irresistibly reminded of the confusion of a school during the temporary absence of the master. By attending to the conversation of the *monomaniac*, on the other hand, we shall perceive a unity of design, so to speak, in all he says. After illustrating this remark by examples, Dr Davey proceeded : " Now that I am speaking of monomania, I am reminded of a series of very beautiful experiments I had the pleasure of witnessing some ten days since at the house of Dr Elliotson. I allude to the magnetic excitation of cerebation, during which I was no less astonished than gratified in having the opportunity of witnessing in one individual more forms of monomania than I have ever seen even within the walls of Hanwell, or elsewhere ; and each individual form of the disease was so splendidly illustrated, that I very much doubt, if even the reality could, under any circumstances, have excelled it. The pencil of no artist could have surpassed the original ; and not even a Siddons, a Rachel, a Kean, or a Macready, could have wished to do more than copy it. No art, ancient or modern, could give better expression to the natural language of *intense feeling*. I am strongly disposed to think that animal magnetism will be found, ere long, indispensable as a remedial agent in the treatment of the insane.—To resume, however. Such being the view I take of this question, it follows that an examination of the cranium in such forms of disease,—excepting of course monomania,—is no more likely to give us the character of the insanity, or to clear up any doubt that may be entertained respecting its existence, than it would be likely to enable the phrenologist to divine the nature of a dream itself." Having next adverted to the error of supposing that, by merely examining the head of an insane patient, we may gain immediately a clear view of the character of the malady, Dr Davey went on to say, that, as one of the medical officers of the largest Insane Hospital in the world, his dissections of diseased brains are very numerous ; and although, in the majority of instances, very evident marks of pathological change are to be observed either in the brain or membranes (more generally in the latter), yet instances are frequently witnessed, wherein it is quite impos-

sible, with our *present means of investigation*, to detect the slightest abnormal appearance. This circumstance, however, by no means demonstrates that no change has taken place; and though there may be, and are, cases of insanity in which the whole brain is unchanged,—that is, without *appreciable* morbid alteration of structure, and especially so in those cases of mania, the mere sequence or accompaniment of epilepsy, and wherein the disease assumes a paroxysmal character,—yet nothing is more sure than that very much remains to be done concerning the minute pathology of the brain. Dr Davey then illustrated, by various cases, the remark, that insanity, whatever its form, is generally modified according to the organization of the brain; since it is the largest organs that are most predisposed to disease. He next enforced the propriety of taking into view the sympathetic effects of derangement of the abdominal viscera, and other parts of the body, upon the brain;—adverted to the prevalent errors in the treatment of criminals, many of whom are executed though insane;—and concluded his discourse (of which, from its great length and somewhat unconnected character, we have been able to present but an imperfect outline) by expressing the opinion, that no medical curriculum is complete without a course of lectures on Phrenology. The Lunatic Asylums about the metropolis should, he contended, be made schools of this particular branch of medicine, where medical students should be instructed, both theoretically and practically, in the physiology and pathology of the brain. At Haswell, an example has already been set; the medical officers of other similar institutions have but to follow in the path of Dr Conolly.

Mr E. J. HYTCHER read a paper *On Love of the Past*; and Mr RICHARD BEAMISH communicated the *Case of a man who, with difficulty, after thirteen years' instruction, was taught to read, and who now spells words of more than two letters*,—illustrated by a cast of his head. He also communicated to the medical gentlemen present, a *Case of diminution of the Cerebellum in consequence of a wound*, accompanied with loss of sexual desire, diminution of the testes, and development of the mammæ similar to a woman's; the case being illustrated by casts of the head, breasts, and testes.

The minutes of the adjourned General Meeting of the Association, held on the 8th June 1841, were read and confirmed; and it was resolved, (1.) That the list of twenty-four names, recommended by the Committee, be elected as the new Committee, with power to add to their number, in accordance

with the second law of the Association; (2.) That George Lance, Esq.; and William Wood, Esq., be auditors of the accounts of the present session, as recommended by the Committee; and, (3.) That the Phrenological Society of London be requested to take charge of the casts which have this year been presented to the Association. The new Committee consists of the following gentlemen:—

H. G. Atkinson; Dr Barlow; T. H. Bastard; F. B. Beamish; Dr A. Combe; George Combe; Dr Conolly; Dr A. Cox; Robert Cox; Dr Elliotson; Dr Evanson; Dr Engle-
due; J. W. Gardiner; J. I. Hawkins; W. Hering; Sir George Mackenzie, Bart.; R. Maugham; M. B. Sampson; James Simpson; Samuel Solly; E. S. Symes; C. A. Tulk; G. Uwins, R. A.—*Secretary*, E. S. Symes, 38 Hill Street, Berkeley Square, London.*

The following statement was read:—

THE COMMITTEE OF THE FIFTH SESSION OF THE PHRENOLOGICAL ASSOCIATION, IN ACCOUNT WITH RICHARD CULL, Esq.

Dr.

1841.

Aug. 15. Mr Savill's bill for printing 1000 copies of the proceedings of the fourth session, . . . L.7 7 6

Mr Fry, law-stationer, copying report; omitted in last year's account, . . . 0 9 0

Postages paid by Mr Sampson for circulating the Report, and issuing the first Prospectus of the Fifth Session, 3 3 10

1842.

June. Stationery and minute-book, . . . 0 18 4

Advertising, as per bills, . . . 19 13 6

Printing for the fifth session, . . . 4 17 0

Postages for the fifth session, . . . 3 2 10

Two visitors' tickets changed for members' tickets—both having been credited, . . . 0 10 0

Cab-hire, messengers, and sundries, 1 10 3

Rent of rooms at Society of Arts, 18 18 0

L.60 10 3

Cr.

1841.

July 20. Balance from Mr Bastard, . . . L.12 17 6

Subscription of Mr Greatorex, received through Mr Bastard, . . . 0 10 0

Carry forward, L.13 7 6 L.60 10 3

* Several of these gentlemen have lately resigned as members of the Association.—ED.

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1842.	Brought forward,	L.13	7	6	L.60	10	3
May 23.	Annual subscription from 59 members,	29	10	0			
to							
June 24.	Thirty-four visitors' tickets at 5s.,	8	0	0			
	Donation from Rev. S. Wood, per Mr						
	Cull, ...	0	10	0			
		L.51	7	6			
	Deficiency,	9	2	9			
					L.60	10	3

We, the Auditors, have examined the above account, with the vouchers, and find it to be correct.

(Signed) GEORGE LANCE.
WILLIAM WOOD.

Mr DONOVAN rose, and expressed his gratification at seeing the Association in a state of bankruptcy, inasmuch as such a position would prevent a repetition of the disgraceful proceedings of this session, when Mesmerism and Materialism were so mischievously mixed up with Phrenology, in obedience to the purposes of the party who had so unfortunately obtained a preponderating influence in the Association.

Several members of the committee spoke warmly in disapprobation of the spirit of Mr Donovan's remarks, and maintained the propriety of the course that had been pursued; and Mr SIMPSON entered into a narrative of mesmeric operations which he had witnessed that morning at Dr Elliotson's house. Mr DONOVAN begged that gentlemen would not force him into a position which he had not taken. He was no enemy to mesmeric inquiries, nor to freedom of opinion on religious topics; but he maintained then, as he had at first, that the Phrenological Association did not afford a fit theatre for such discussions; that the public thought with him, was very evident.

It was then agreed among the members of the committee present, that each should pay his share towards the deficiency, but that no further expenditure for printing reports, &c., should be incurred, as the proceedings of the session were objected to by several speakers.

Mr LOGAN proposed that the next meeting should take place in Edinburgh; but on this point no determination was come to.

The following are the names of twenty-eight members admitted from the closing of the fourth, to the closing of the fifth session of the Association:—Robert Jamieson; James C. L. Carson, M. D.; C. J. Hampton; Joseph C. Hytche;

Henry Robertson; John Atkins; James K. Dow; William Bye Lidiard; Count Francis Thun; B. W. Seiler, M.D.; Augustus Hedenus, M.D.; S. P. Partridge, M.D.; Francis Duval; Charles B. Mansfield; Professor Rigoni, of Pavia; Mr Serjeant Adams; Mr Thomas Laker; Alexander John Ellis, B.A.; Mr Webber; Mrs Webber; James George Davey, M.D.; Henry Brookes; General Briggs; W. Fraser Tolmie; Thomas Chapman; Isaac Jolit, M.D.; Sir William Baynes, Bart.; John Wingfield.

II.—*The Split in the Phrenological Association.*

TO THE EDITOR.

Sir,—To many of your readers the announcement of the mere fact, that differences have arisen among the members of the Phrenological Association, such as to lead to the resignation of many of the members, may not be satisfactory. They may wish to learn why the declaration of a doctrine which can neither be proved nor disproved, should have led to the decided disapprobation of so many Phrenologists. They may also be pleased to see the utmost extent to which proof can go in support of the doctrine; and the public may be enabled to do justice between the parties, when it is made clear that Phrenology needs no support from, and cannot be injured by, such a doctrine.

The doctrine is, that there is no such thing as mind; that what are called mental operations, are in reality material secretions from the brain; in short, that the brain is the mind. Before the physiology of the brain was known, materialists made use of some such arguments as those which I will now state. It is admitted that the lower animals have no mind—no soul; but they possess senses and certain faculties in common with man. A dog, for example, sees, hears, smells, tastes, and touches, by means of external organs similar to those of man. In man it is said that perception is an act of mind; that it is to the mind the organs of the external senses convey the impressions made upon them; so that the will produces actions, deemed necessary in consequence of the mind being made aware of certain external circumstances. When the actions of a dog are observed, it is evident that external circumstances are made known to it by means precisely the same as in the case of man; that similar external circumstances produce similar actions; and hence, that if a dog has no mind, it cannot be proved by actions resulting from the perception

of external objects, and their relations and movements, that man has such a thing as mind. The converse of this is equally true ; that if it be admitted that man has a mind, it cannot be proved that a dog has no mind. The modern materialists of course deny, in reference both to man and the lower creation, that they possess such a thing as mind. They may farther argue on the facts of reproduction. They may ask, Does the mind exist in the seminal fluid of the male, or in the ovum of the female ?—a question that cannot be answered affirmatively, or negatively. How then, it is demanded, does mind become connected with body ? If it be propagated, it must be material. If it be not propagated, those who believe in its existence must shew some ground for their belief,—that they know that for every body a mind is prepared,—that they can exhibit the time and mode of union, as well as whence and how the mind comes to the body. Then comes the inquiry, Is the mind perfect, or imperfect, on its entrance into the body ? Phrenologists say, that they know not the condition of mind when a child is born ; but they know that the manifestations of mind become more and more decided as the brain continues to grow, and to be more and more fitted for its operations. It is not their province, but that of the metaphysicians, to speculate on such subjects ; and in most phrenological works, the inquiry is set aside as utterly useless ; because, even if it could be proved there is no such thing as mind, the discovery would not benefit the race. I think it is Mr Combe who remarks, in some of his works, that if it be the brain which thinks, the Creator, we may be assured, has taken the best possible means for producing thought ; and so it is, if he has added anything mysterious, call it mind or what we will, to complete the constitution of man and animals. If we cannot see mind, that is no argument against its existence, any more than our not seeing the *modus operandi* of the brain when it excites particular actions, can be brought as a proof that the brain does not act at all. The modern Materialists speak of thought as a secretion of the brain ; but they have no means of proving that it is so, because thought is not a thing that can be inspected. The whole subject is one involved in the deepest mystery ; and let the observations of manifestation, and of its connection with the brain, be ever so minute and careful, no demonstration can ever be made that there is not, or cannot be, some power connected with the body that gives us the notions of personal identity, and performs the office of what we denominate Will.

Such being the state of the question, it has surprised and offended many members of the Phrenological Association, that

any individual, in an address on the opening of a session, should dogmatically announce that there is no such thing as mind, without pretending to exhibit to the view a single proof of such an assumption. Dr Engledue calls upon phrenologists who believe in the existence of mind to shew it, saying that as it cannot be seen, it cannot exist. He does this in the same breath with the announcement that thought is a secretion of the brain; forgetting that he may be called on to exhibit this material secretion, and be forced to admit that his own objection to the existence of mind may be brought with equal force against the existence of his secretion. I meddle not with speculations respecting things which are mysterious; and I agree with those who think that it was most injudicious in Dr Engledue to deprecate prejudice, and at the same time to give, most unnecessarily, strong grounds for those whose lives are devoted to the fostering of that prime obstacle to advancing knowledge, to cause it to strike its roots yet deeper, so as to hold out more firmly against that knowledge which facts, plainly seen, have achieved for us. As phrenologists, we can join, for once, with bigotry and fanaticism in denouncing the doctrine broached before the Phrenological Association. But notwithstanding our disavowal, Phrenology will be dragged forth as countenancing it, and its progress and applications will be sadly retarded. Let Dr Engledue and his associates shew, if they can, to what good purpose their doctrine can be applied, supposing it true, and capable of demonstration. It cannot improve Phrenology as a science applicable to ordinary life. Nothing like a tangible fact is held out of which we can avail ourselves; but happily, neither is there anything which can change, in the slightest degree, the facts on which Phrenology is founded. The doctrine is a mere assumption that the brain performs mental functions without mind. It may do so, or it may not; all is mystery. A man may entertain whatever system of religion is most congenial to his constitution, and be a phrenologist at the same time. Christian and phrenological morals are in the strictest accord; and the same views of God's works, leading to the adoration of his wisdom and goodness, may be entertained by both, whether the Creator has formed mind out of matter, or of something of which we know nothing. Even in the supposition of my agreeing to the doctrine, I could not approve of its having been brought forward as it has been,—a weapon placed in the hand of fanaticism and ignorance to be wielded against Phrenology. Little did I dream that I should be forced to resign my place as a member of an Association which I believe I was among the first to suggest, that I might not be held as giving

the slightest aid to prejudices already too inveterate against Phrenology, but which Dr Engledue will have the credit of rendering doubly morbid and incurable. There has not yet been opportunity for ascertaining the sentiments of many of the Edinburgh phrenologists; but I have reason to think, that the one of them who moved thanks to Dr Engledue for his address, stands single in his gratitude.—I am, your faithful servant,

August, 1842.

G. S. MACKENZIE.

REMARKS BY THE EDITOR.

Acting upon our avowed principle, that this Journal is designed "to represent no *party* of phrenologists," we have thought it our duty to insert Dr Engledue's Address, and also the comments and opinions of his opponents. But, before taking leave of the subject, we feel called upon to add our own protest against his new and strange propositions,—that Materialism constitutes the only true and rational basis of Phrenology; that those who regard the brain as simply "the organ of the mind," are blinded by ignorance, prejudice, or moral cowardice; and, lastly, that no progress can be made in Phrenology till the phantom of "mind" as a distinct essence be discarded, and "cerebration" enthroned in its stead.

Had Dr Engledue merely expressed his own belief in the non-existence of mind, and adduced what evidence he could in support of that belief, we should have been the last to find fault with him for doing so. But the case is greatly altered when he proceeds not only to represent materialism as the sole firm basis on which Phrenology can rest, but to refer to the great founder of the science himself, as propounding the same views. If Dr E. had even adduced in his own support any fact or argument more conclusive than those which have long been familiar to philosophers, we could readily have excused him for dogmatically propounding the above inferences as the legitimate results, although he could not but know that they would re-arouse against Phrenology a host of prejudices which had well nigh disappeared. But when we find that he has not added one iota to the force of the pre-existing evidence on either side, but left the question exactly where it stood, we cannot take so lenient a view of his conduct. Even in his statement that materialism is "the doctrine of Gall," he is singularly inaccurate, notwithstanding any support which he may be thought to derive from the quotation of Gall's words,

to the effect that,—“ Your understanding, your volition, your free will, your affection, your judgment, instinct, &c., will be no longer personified beings—they will be cerebral functions.” From what part of Gall’s writings this sentence is taken, we do not know, and Dr Engledue has not mentioned ; but we humbly submit, that, instead of separating casual expressions from a context which, we feel assured, would place their meaning in a different light, Dr Engledue was bound to look for the proper evidence of Gall’s opinion in the chapter which he has devoted exclusively to Materialism, and where he has stated his views in unambiguous and ample terms. So far from Gall being a materialist, the truth is, that no fewer than sixteen pages of his 8vo work (tome i. pp. 228–244) are devoted to “ proving how unjust is the inference, that he acknowledged no other substance than that of matter” (p. 232). “ There exists, in my opinion,” says he, “ only one single principle, which sees, feels, tastes, hears, and touches, which thinks and wills. But, in order that this principle may become conscious of light and sound, that it may feel, taste, and touch, that it may manifest its different kinds of thoughts and propensities, it has need of different material instruments, without which the exercise of all these faculties would be impossible. It results, then, from this discussion, that those who charge me with materialism because I regard material conditions as indispensable to the exercise of the faculties of the soul, confound these faculties with the instruments by means of which they act” (p. 243–4). And, farther on, speaking of some of his adversaries, who, he says, had maintained with impudent dishonesty, that he taught the irresistibility of human actions in Germany, but was more circumspect in France, he indignantly remarks,—“ I esteem my doctrine too much, to change or mutilate it in favour of the prejudices or the opinions of any people. I speak and write neither for the Germans nor for the French alone. As an observer of nature, my design is to present and defend a doctrine which may be everywhere useful to mankind, which may be compatible with all forms of government and with true morality, and which, in all ages, may be adapted to the wants of human nature, since it is derived from the nature of things” (p. 313.) These passages seem to us conclusive against Dr Engledue. That Gall held the doctrine of immaterialism is, we readily admit, no reason why his followers should not call it in question, if they discover grounds for doing so ; but surely it is incumbent on them to take his own account of the opinions he held.

Dr Engledue speaks of immaterialism as a mere “ conjectural doctrine,” springing from “ love of the marvellous”—

an opinion clung to through "disinclination to shake off old garments," and in opposition to a doctrine that is "self-evident;" and he roundly affirms that "no cerebral physiologist can bring forward a single fact to support the position" that what is called mind exists. From these statements one might imagine that the supporters of immaterialism have not a particle of evidence on their side. Now, so far is this from being the case, that for a century past the fight has been maintained with great vigour between the two parties; and, while some men of great acuteness and moral excellence have ranged themselves among the materialists, it is equally undeniable that others, not inferior in these attributes to their opponents, have urged, and been convinced by, a large array of facts and arguments, that such a thing as mind does in reality exist. It would be rash, we think, to charge such men as Dr Samuel Clarke,* Dr Thomas Brown,† Mr William Belsham,‡ Dr J. C. Prichard,§ and Dr John Bostock,|| with holding, through blind prejudice alone, opinions which in fact they maturely considered, and for which they have given many reasons that were satisfactory to the great majority of their readers.

It is unfortunate that the doctrine of immortality is so generally confounded with that of the existence of a spiritual essence called mind. On former occasions (vol. viii. p. 557, 604), we expressed our concurrence in the opinion, that these two doctrines are quite independent of each other; quoting at the same time from Locke, Dr Rush, and Dr Elliotson, by whom the same view of the subject is taken. We may now add, that in Locke's private journal, published by Lord King in his *Life of that philosopher*, pp. 128-30, this opinion is clearly and conclusively demonstrated; as it is likewise by the Rev. Thomas Belsham, in his "*Discourses, Doctrinal and Practical*," (Lond. 1826) p. 458. That Dr Parr was on the same side, we learn from his "*Memoirs*" by Mr Field, vol. ii. p. 366. Indeed, it seems to be generally admitted by divines, that (to use the words of Dr South) the immortality of the soul is a doctrine "which philosophy indeed conjectures, but only religion proves."¶ So far as we know, Dr Henry More is the only eminent writer who considers immortality to be demonstrable by reason alone.** That Milton thought it perfectly consistent with materialism, is evident from the following

* See his *Replies to Collins*.

† Lecture XCVI.

‡ *Essays*, i. 32.

§ On a Vital Principle, pp. 38-58.

|| *Elementary System of Physiology*, iii. 191, 2d edit.

¶ South's *Sermons*, i. 136, edit. 1715. Sherlock ("*On Immortality*") takes the same view.

** See his *Philosophical Works*; "*Discourse of the Immortality of the Soul*."



passage :—" Man is a living being, intrinsically and properly one and individual, not compound or separable, not, according to the common opinion, made up and framed of two distinct and different natures, as of soul and body—but the whole man is soul, and the soul man ; that is to say, a body or substantive individual, animated, sensitive, and rational."*

It seems to us, then, that religion has nothing to fear from the doctrine of materialism, even if established ; but since the notion prevails extensively that dangerous consequences are inseparable from it, we consider Dr Engledue to have injured the cause of Phrenology and the usefulness of the Association, not only by publicly professing his own opinions with respect to the non-existence of mind, but still more by erroneously representing the truth of Phrenology itself to be involved in their accuracy. In our view, the materialist and the immaterialist may equally be phrenologists ; and we are puzzled to discover how the views of the one can be rendered more useful or practical than those of the other. What does it signify, in relation to human improvement, whether a certain part of the brain is, in the words of Gall, " the material condition which renders the exercise of a faculty possible ;" or, as Dr Engledue maintains, an organ performing the function of " cerebation?" Improve the organ, says the one, and you increase the capability of the mind to display, through its instrumentality, a certain mental power. Improve the organ, says the other, and you increase that organ's capability of performing its function of cerebation. Dr Engledue, instancing the beneficial results of his doctrine, exclaims, " How much more intelligible and important do the laws of hereditary descent appear !" But is not the man who endeavours to improve the brain upon the one theory, as usefully employed as he who strives to effect the same object upon the other ? Highly as we estimate the importance of the laws of hereditary descent, we cannot agree with Dr Engledue in thinking, that, " were they only followed out in their broad features, society might be remodelled in the course of three or four generations ;" and that, although " high moral and intellectual pre-eminence is now the exception and not the rule, man could soon reverse the picture." He seems to forget that the mass who form " the rule" cannot, even in more favourable circumstances than are yet possible, produce a race much better than themselves ; and that the work of human improvement must therefore be slow.

Of Mesmero-phrenology, which forms the other prominent topic of Dr Engledue's Address, we shall merely say, that although, for want of the requisite opportunities, we have not

* Treatise on Christian Doctrine, i. 250-1.

yet witnessed any experiments of the kind described, and consequently are not qualified either to admit or dispute their accuracy; still we consider the statements of Dr E. and his adherents to deserve a sober and candid investigation. If true, they are highly important; while, on the supposition that conclusions have been too hastily drawn by ardent minds, publicity is the best means of effecting an exposure of errors really committed.—EDITOR.

III. *Mr Combe's Lectures in Heidelberg.*

MANNHEIM, 22d July 1842.

To the Editor of the Phrenological Journal of Edinburgh.

SIR,—The course of lectures* which Mr George Combe delivered at Heidelberg this summer, has been closed to-day.

* We subjoin the German notice of the lectures and address, which appeared in the Heidelberg Journal.

“*Heidelberg, 23. Juli.*—Die phrenologischen Vorlesungen, welche Hr. Georg Combe im Laufe dieses Sommers hier hielt, sind nun geschlossen. Sie sind vom Anfang bis zum Ende mit steigendem Interesse besucht worden. Besonders inhaltschwer waren die letzten betzten Vorlesungen, welche von der Phrenologie in ihrer Anwendung auf Erziehung und Criminalgesetzgebung handelten. Freilich war es bei der Kürze der Zeit, welche diesen Vorlesungen gewidmet wurde (23 Stunden im Ganzen), nicht möglich, in die Einzelheiten der Wissenschaft einzugehen. Es konnten nur die Grundsätze derselben gegeben werden. In welcher Weise diejenigen, welche diese Vorlesungen hörten, sie beurtheilten, spricht sich am Deutlichsten aus in der Adresse, welche ohne Widerspruch von irgend einer Seite von den Zuhörern beschlossen und dem Hrn. Combe durch eine Deputation zugestellt wurde. Dieselbe lautet wörtlich wie folgt:

“HOCHGEZEHRTER HERR!

“Vierzig Jahre sind verflossen, seit Gall mit der Lehre, wozu er den Grund legte, aus Deutschland zog. Ihnen gebührt das Verdienst, sie in derjenigen Ausbildung, welche ihr mittlerweile im Auslande geworden war, in die Heimath zurückgebracht zu haben. Empfangen Sie dafür unsern warmen, unsern herzlichsten Dank! Wir wissen die Opfer, die Sie uns und der Wissenschaft gebracht, die Mühe, welche Sie verwandten, in unserer Sprache zu uns zu reden, gebührend zu schätzen.—Schon die ersten Ihrer Vorlesungen fesselten unsere Aufmerksamkeit. Eine Wissenschaft, deren Aufgabe ist, die Tiefen des Seelenlebens zu ergründen, die Werkzeuge gewissermassen anschaulich zu machen, mit welchen der Geist in diese von Raum und Zeit umschlossene Welt einzugreifen befähigt wird—eine solche Wissenschaft wird an und für sich schon die Theilnahme jedes denkenden Menschen in Anspruch nehmen. Um so mehr musste daher unser Interesse rege werden, da es uns vergönnt war, Ihre Vorträge anzuhören, welche das Gepräge wissenschaftlichen Ernstes, tiefer Ueberzeugung und des ausdauernden Fleisses so klar und deutlich an sich trugen. Möge der Saamen, den Sie ausgestreut, reiche Saaten tragen! An den Früchten bewährt sich auch die Wissenschaft. Mögen die schönsten an dem Baume reifen, welchen



It has been attended with increasing interest by his audience from beginning to end. Nothing can be more satisfactory

Sie, hochgeehrter Herr, wieder unter uns gepflanzt, und mögen Sie auch in Ihrem fernen Vaterlande Ihrer Schüler zu Heidelberg nicht vergessen, wie wir Sie und Ihre lehrreichen Vorträge immer in lebendigem Andenken behalten werden.

“ *Heidelberg, den 22. Juli 1842.*

“ MITTERMAIER. NAGELE. CHELIUS. SPENGLER.

“ WARTENSLEBEN. V. STRUVE. ROLLER, &c. &c.”

“ Nachdem diese Adresse dem Hrn. Combe vorgelesen worden war, antwortete derselbe:

“ MEINE HERREN!

“ Erlauben Sie mir, Ihnen meinen herzlichen Dank für die Adresse auszusprechen, welche Sie an mich zu richten mir die Ehre erwiesen. Ihre gütige und günstige Würdigung meiner Bestrebungen hat mir die grosse Freude bereitet, und um so grössere, je tiefer ich die Schwierigkeiten empfand, welche mir die fremde Sprache in den Weg legte, und je mehr ich besorgte, meine mangelhafte Darstellung der Phrenologie könne der Wissenschaft, welche ich zu fördern wünschte, in Ihren Augen Eintrag thun. Erlauben Sie mir übrigens hinzuzufügen, dass, so sehr ich diesen Ausdruck Ihrer günstigen Gesinnung schätze, Sie mir zuvor schon ein, wo möglich, noch erfreulicheres Zeugnis Ihrer Achtung ertheilt hatten. Denn ich weiss, dass unter meinen Zuhörern Männer waren, welche den höchsten Rang in den medizinischen und juristischen Wissenschaften an dieser Universität einnehmen, und sowohl durch ihre hohen Talente als ausgebreitetes Wissen befähigt sind, ein gesundes Urtheil über jeden wissenschaftlichen Gegenstand, der sich ihnen darbietet, sich zu bilden; und Männer, welche von ihren Berufsgeschäften so sehr in Anspruch genommen sind, dass ihnen keine Zeit für bedeutungslose Bestrebungen bleibt. Als ich sah, dass solche Männer Tag für Tag meine Vorlesungen die sich über dreiundzwanzig Tage erstreckten, durch ihren unausgesetzten Besuch beehrten, habe ich gefühlt, dass sie dadurch dem der Phrenologie inwohnenden Interesse und ihrem wissenschaftlichen Charakter den befriedigendsten Tribut, der entrichtet werden konnte, entrichteten. Nur die Uebereinstimmung ihrer Grundsätze mit denjenigen der Vernunft und der Physiologie, und der offenbare Nutzen, welchen ihre Anwendung gewährt, konnte jene ernste und ausdauernde Aufmerksamkeit zur Folge haben, womit Sie mich beehrt haben.

“ Aus dem Interesse, mit welchem Sie meinen unvollkommenen Vorträgen folgten, leite ich die Hoffnung ab, dass Deutschland nicht länger eines der grossartigsten Produkte seines Genius vernachlässigen, sondern dass es sich beeilen werde, in den Augen Europa's und Amerika's sich den Ruhm anzueignen, den es in Gefahr steht zu verlieren, wenn es fremden Nationen die Aufgabe überlässt Gall's grosse Entdeckung von den Verrichtungen des Gehirns und der Philosophie des menschlichen Geistes zu würdigen und in Anwendung zu bringen.

“ Empfangen Sie, meine Herren, die Versicherung meiner höchsten Achtung und dauernden Dankbarkeit für die Güte, womit Sie meine schwachen Bemühungen, die Aufmerksamkeit Ihrer Landsleute auf die Wichtigkeit der neuen Philosophie zu richten, ermuthigt haben.”

“ In einigen Tagen wird Herr Combe unsere Stadt und Umgegend verlassen, und nach kurzem Verweilen in Ischl sich seiner Heimath, Edinburg, wieder zuwenden. Allein wir hoffen, er werde nach Deutschland in einiger Zeit zurückkehren. Er hat nun die Schwierigkeiten, welche ihm die fremde Sprache bereitete, zum grössten Theile überwunden, und es wäre traurig, wenn er sich derselben nicht bedienen wollte, um die unter der Asche glimmenden Funken, welche Gall selbst angezündet hatte, zur Flamme zu fachen. Jedenfalls darf behauptet werden: mit Hrn. Combe wird uns die Phrenologie nicht verlassen. Seine Vorlesungen werden nicht vergessen werden; die

than the way in which they expressed themselves upon Phrenology, as a science, and upon the merits of the lecturer, in an address voted to him unanimously, and presented to him by a deputation of the audience. When it is considered that the men who signed this address are for the greatest part first-rate men of their respective sciences, I am sure it must be interesting to you to know its contents. As it is not very long, I give it you fully in a literal translation. But as the subscribers of it are perhaps not generally as well known in Scotland as they are in Germany, I give you here some particulars about the most eminent of them. Dr and Professor Mittermaier is not only known throughout Europe by his writings on criminal legislation, but he has been also for many years a most active man in all the political affairs of our country. He has been several times president of our House of Commons, has been for years member of our Board of Legislation, and exercises, by means of his lectures, a very great influence upon the minds of the academical youth. He is become a thorough phrenologist, has repeatedly not only recommended to his audience a particular study of Phrenology, but has also, on all occasions, introduced into his lectures such facts and such reasonings offered by this doctrine, as served his purpose to throw a clearer light on different parts of the science he lectures upon. The names of Dr Chelius and Dr Nægele are not less honourably known in their respective branches. The former, especially, will be remembered by many English, who, while they were in Germany, were attended by him as their physician. Dr Roller is the director of the Lunatic Asylum of our Grand-Duchy. Under his immediate influence and superintendence a very spacious and well-contrived Lunatic Asylum has been built, these last years, in the most beautiful part of our country, by which he did set to humanity, as well as to himself, a lasting monument. So much about some of the dignitaries. Now I subjoin the address itself.

“ Sir,—Nearly forty years have passed away since Dr Gall withdrew from Germany, and with him departed from among us the doctrine of which he had laid the foundation. You* have the merit of having brought it back to its home, in that

Wissenschaft, welche in Deutschland vierzig Jahre lang auf dem Pfähle der Vergessenheit und des Vorurtheils schlief, ist durch ihn erweckt worden, und sie wird sich auf jenen Pfahl nicht wieder schlafen legen.”—*Heidelberg Journal Montagden, 25 Juli 1842.*

* It is proper to mention, that, two years ago, Mr R. R. Noel lectured on Phrenology, in German, at Prague; and that his lectures are now published at Dresden.

state of improvement which it has reached, in the mean time, in foreign countries. For this, please to accept our warm and cordial thanks. We know how to appreciate the sacrifices you have made to us and to science, and the labour which it has cost you to address us in our own language. Even from the first, our attention was riveted by your lectures. A science, the aim of which is to fathom the depths of the mind, and to unfold to practical observation the instruments by means of which it acts in this material world, is calculated in itself to command the attention of every thinking man; but much more has it been interesting to us, when we were favoured by hearing your lectures, which bore so clearly and explicitly the stamp of scientific gravity, deep conviction, and most persevering zeal. May the seed which you have scattered produce a rich crop! The fruits which a science yields are the best proofs of its value. May they grow in brightest beauty on the tree which you have again planted amongst us, and may you not forget, in your distant father-land, your scholars at Heidelberg, as we shall always keep you and your interesting lectures in vivid remembrance! *Heidelberg, the 22d July 1842.* (Signed) CHELIUS, M. D.; NÆGELE, M. D.; MITTERMAIER; ROLLER, M. D.; WARTENSLEBEN, Count; SPENGEL; VON STRUVE; &c. &c."

Along with this address a portfolio, bearing an inscription, and containing a collection of engravings representing the most beautiful parts of the ruin of the celebrated castle and town of Heidelberg, was tendered to Mr Combe, not as a measure, but as a heart-felt token, of the high respect for his character, as well as scientific attainments, which all his audience bears to him.

Mr Combe answered the deputation in the following words:

"Gentlemen,—I beg leave to express my heartfelt gratitude for the honour which you have done me in the address now delivered. Deeply embarrassed as I have been with the difficulties of lecturing in a foreign language, and anxious as I have felt, lest, by the imperfections of my exposition of Phrenology, I should injure, in your eyes, the cause which I was desirous to advance, your kind and favourable appreciation of my efforts has afforded me the highest gratification. Allow me to add, however, that greatly as I esteem this expression of your favourable opinion, you had previously afforded me another testimony of your respect, which has been to me, if possible, still more agreeable. For I know that among my hearers have been men holding the first rank in the medical and legal sciences in this University, and capable, equally by their high talents and extensive attainments, of forming a

sound judgment on every scientific topic presented to their consideration ; men also, so deeply engaged in the practical duties of their professions, that they enjoy no leisure for trivial pursuits. When I have seen such men honouring my lectures, night after night, by their constant attendance, I have felt that, by that attendance, extending over twenty-three evenings, they paid a tribute to the inherent interest and scientific character of Phrenology, the most gratifying which could have been given. Only the accordance of its principles with the dictates of reason and of physiological science, and the manifest utility of its applications, could have commanded that close and continued attention with which you have honoured me. From the interest, therefore, with which you have listened to my imperfect expositions, I anticipate that Germany will no longer neglect one of the noblest productions of her own genius ; but that she will now hasten to appropriate to herself, in the eyes of Europe and America, the glory which she would lose by leaving to foreign nations the honour of appreciating and applying Gall's great discovery of the Functions of the Brain and of the Philosophy of the Human Mind. Accept, gentlemen, the assurance of my highest esteem and lasting gratitude, for the kindness with which you have encouraged my humble efforts to awaken your countrymen to the importance of the new philosophy."

In a few days Mr Combe will leave this part of Germany to return to Scotland, after a little trip which he intends to make to Ischl, near Salzburg ; but we hope that he will return again to our country. He has now overcome the difficulties of lecturing in a foreign language, and it would be indeed a pity if, after having taken all the trouble to make himself master of the German language, he should not use his attainments in rekindling the few sparks lighted by Gall himself, and not yet extinguished by time and prejudice. At any rate, I may venture to predict, that, with Mr George Combe, Phrenology will not leave us. His lectures will not be forgotten. The science, which in Germany has reposed for nearly forty years on the pillow of prejudice and oblivion, has been awakened by him, and it will never sleep on that pillow again.

I am, Sir, your obedient servant, GUSTAV VON STRUVE.

IV. *Excitement of the Cerebral Organs by Mesmerism.*

TO THE EDITOR OF THE PHRENOLOGICAL JOURNAL.

SIR,—While lately in London, I found the phrenological world in considerable excitement with the alleged discovery, that the cerebral organs can be roused into activity and ma-



nifestation by direct local application of the mesmeric influence, and that the results tend to confirm the correctness both of the localities and functions of the organs, as observed by phrenologists. Dr Engledue informed the Phrenological Association, which met in June last, that he had succeeded in producing in a patient while in the mesmeric sleep, unequivocal manifestations of various faculties, by mesmerising the organs with superadded or newly applied influence; his subject, a female, being, as he declared, ignorant not only of the situation of the organs, but of Phrenology itself. Mr Brookes of Birmingham, and Mr Atkinson of London, who were both present, lent their aid to the credibility of Dr Engledue's narrative, by declaring that they had each succeeded in obtaining from other subjects the like results.

I had, moreover, communicated to me a particular report, in writing, of experiments tried on a female at Chatham, who, as a domestic servant, was not likely to be familiar with the phrenological organs, by a military gentleman there, of whose integrity and correctness those who knew him spoke in the highest terms. In that case the manifestations were stated to have been very striking; in some of the organs almost violent.

Feeling deeply interested in this alleged discovery, at once so confirmatory of Mesmerism itself, as an actual influence and state, and of Phrenology, I resolved to see any cases accessible in London, and qualify myself to bear witness to the phenomena which should be obvious to my perceptive faculties; and these I stretched to their full limits of attention. Mr Brookes was the first to welcome me to a private trial on Sarah B., a young female residing with himself and Mrs Brookes as domestic servant, who, he stated, had, by a long course of Mesmerism, been cured of epileptic fits, and even insanity. She appeared to be about twenty years of age, of a nervous and rather unhealthy appearance, and extremely modest and timid demeanour. In about ten minutes she was thrown into sound mesmeric sleep or coma, and her limbs, both arms and legs, rendered rigidly cataleptic. This I had often seen done before, by other mesmerisers with other patients. The catalepsy was then relaxed, and Sarah, by a series of shakings and pattings, chiefly about the face, throat, and stomach, was brought into what is called the sleep-waking state, when a conversation may be carried on with the patient. In this latter state the pupils of the eyes were shewn to us dilated to the full extent of the iris in each eye, a condition demonstrative of the reality of the mesmeric state, and at the same time, I believe, inconsistent with vision.

With regard to my convictions on the subject of the patient's

state, I may here say, that I have seen the same produced in twelve different individuals, and by several mesmerisers, and have no doubt of its reality. Indeed, I understand that few candid persons who have given attention to the subject doubt the reality of the mesmeric state, both comatose and sleep-waking, whatever may be believed as to clairvoyance, and other alleged phenomena. The sleep-waking was enough for the purpose in hand. Of the trust-worthiness of Mr Brookes I could not doubt. Nothing could be more open, candid, and unpretending than his deportment, and I was favoured with a sight of letters to him in respectful, and even friendly terms, from well-known characters of respectability. I received, moreover, his solemn assurance that Sarah B. had never learned the names, localities, or functions of the phrenological organs from himself; that, on the contrary, he had kept her scrupulously out of the way of even a hint on the subject, and that he was morally certain that she never received information from any other person. He stated that he did not *touch* the organs, but transmitted the influence from his fingers' ends, held at least half an inch from the head, even the hair being carefully smoothed down. It was farther arranged, to prevent the organs to be mesmerised being *named* in the patient's hearing, and, moreover, to remove all idea of a previously understood or arranged series, that I should make choice of the organs, and shew the name of each in writing first to the persons present, and then to Mr Brookes. One important point more was settled, namely, that, as the patient rarely ultroneously spoke, but generally answered questions, these questions should not lead her to the expected manifestation; and, until *after* an organ was unequivocally manifested, should be only, *How do you feel?* or, *What are you thinking of?*

FIRST VISIT TO MR BROOKES.—One gentleman besides myself present. Wishing to witness the effect on the small convolutions of the knowing organs, I wrote down *Form*, shewed it to the other stranger, and handed it to Mr Brookes. He incidentally stated,—as an answer to one objection, namely, that the mesmeriser's *willing* a particular manifestation, may, from what is known of Mesmerism, produce it by mesmeric sympathy—that manifestations sometimes came out which he did *not* will, in consequence of a neighbouring organ being excited. This happened in the present mesmerisation of *Form*, for *Size* also was put into activity. I placed myself so as to see, *with the strictest watchfulness*, all that Mr Brookes did, and to hear all that he said to his patient, or she answered to him. She sat, and he stood, without contact with her, even by a foot or a knee. That she was asleep and unconscious of

our presence and proceedings, I had no doubt, yet still the precautions were proper. Mr Brookes's fingers were, for about a minute, held half an inch from Form, being very silently brought near. To the question, "What are you thinking of?" she answered, "I am in the Park; I see many people, and pretty things. I see such a handsome face; but every thing is big (Size excited). I am big myself, my hand is so large." Here I wrote WEIGHT, feeling a peculiar interest to observe, from the manifestation, whether that much disputed organ was rightly located and named. Mr B's fingers shifted silently onwards over it, and almost instantly the patient of herself repeated, "I am so big, and oh! so heavy." She now shewed considerable agitation and alarm, and seized hold of Mr B., saying, "Oh! my weight will break the floor; I shall fall; I am falling." The next organ, COLOUR, having been influenced without Mr B.'s intention, nosegays, or, as she called them, posies, appeared to her "beautiful flowers; but so *large* and so *heavy*—oh! they will fall upon me and crush me; they are so big, so heavy, they will hurt me; they are flying over me; a cat or dog is flying over me, and will fall and hurt me." Mr B. diminished the mesmeric influence by a rapid movement of his hand over the organs, as if brushing flies from the face; and Form, Size, Weight, and Colour, with Individuality, which seemed to have been mesmerised when Form and Size were approached, all at last acting together, became tranquil, and ceased to manifest themselves. As the patient had hitherto been in perfectly good humour, I wrote DESTRUCTIVENESS for the next experiment. Mr B.'s fingers were for a minute or two held to the organ. A cross expression came over the patient's countenance. To the usual question she answered with considerable temper, "Don't bother me; I could stamp my foot; I feel very angry;" shewing at the same time the quick muscular movements of anger, clenching the hands, &c. As a contrast, BENEVOLENCE was influenced, when the countenance relaxed into good humour and gentleness, and all the natural language of irritation was gone. "How do you feel?" "Very well, very happy; I would wish all to be happy." Another contrast was suddenly tried, and SELF-ESTEEM was chosen. The change was striking; the expression was proud and repulsive. To the question, "What are you thinking of?" the answer was, "Why do you speak to me? you insult me." When asked "How?"—she answered, "Speaking to me insults me." "Explain yourself." "I wont explain; that would be making myself less than you; I am above you; I will not condescend to explain; it is not worth my while." Naturally the girl is remarkably humble and respectful to her master.

Monomania was suddenly mesmerised,—as if another note of an instrument had been struck,—and she was silent, and no longer laughing in her expression and attitude. “What are you thinking of?” was repeatedly asked before she answered, her manner being that of some absorbing meditation; at last she replied, “I am thinking of another world.” “Well,” said Mr. B., “no one is censured or proved there.” “No! God knows us all alike. We should bow to him, but we don’t.” Mr. B. “What made you fancy that you were above me—I suppose you think yourself as good as the Queen?” Answer, “The Queen and a beggar are the same in the sight of God.” So there was still some action of Self-Esteem combined with Veneration, and as Mr. B. said that he never saw Self-Esteem active without raising Destructiveness, the demeanour had still a character of severity, which suggested the excitement of Destructiveness again, when the expression and manner softened; and to the question, “What do you feel?” the answer was, “I feel as if I could not hurt a fly; but I like to talk of another world—I wish to go there—I wish every body to go there.” A conversation about church, the Bible, giving to the poor, the Sabbath, &c., was kept up for some time, when Tessa was mesmerised as she was talking. For a considerable time nothing came of this organ, but at last the patient began to sing; we recognised one of Watts’s hymns, with a hymn-tune. The voice was musical and sweet, but subdued as of one singing in sleep. She continued to sing much longer than we wished, and was with difficulty stopped. The notes gradually died away. AMENITIVITASS was called forth, and soon every feeling and thought were gone but this one. Mr. Brookes afterwards told me that vivacity had been a feature of the girl’s insanity, and that when excited, the organ always acted morbidly, and continued to act long after she waked. It did so on this occasion. It first shewed itself by an *angry* enquiry—for its neighbour Destructiveness was roused by sympathy—why she did not get her dinner! Mr. B. “Dinner! why, you have just had your breakfast.” “I am very hungry, I have two stomachs.” Mr. B. “Will you have some potatoes?” “Yes, yes! (earnestly) I could eat a whole peck, and more when that is done.” I suggested *beans and bacon*, which, without my knowledge, is, it seems, a very favourite food with Sarah B. Instantly her demand for beans and bacon was vehement; other things were suggested, but nothing but beans and bacon was listened to. This, the most troublesome organ yet tried, was for the time got quiet, by much waving over and blowing upon it; and IMITATION was written down. Mr. B. “What are you thinking of? Ans. “My mother. If I were

at home she would give me be-ans and be-acon, that tow would mother,"—imitating the provincial language of her mother. She then spoke like "Tommy Addison" of her village, and next like the minister when he preached. As she laughed when she did all this, we concluded that Wit or Laughter had been influenced at the same time with Imitation. Sarah was then awakened, looked bewildered and then abashed, and said, when asked, that she had no recollection of any thing that had passed during her mesmeric state.

SECOND VISIT.—Ten or twelve persons, both ladies and gentlemen, present. The mesmeric sleep and catalepsy being produced, and the latter relaxed, the sleep-waking state was established, with pupils dilated as formerly.

WEIGHT was mesmerised, and still greater alarm was manifested, and tears were shed. She called out that her head was falling off, and begged that it might be caught. She complained of pain, and when asked where? she put her finger on the organ of Weight—"There, there, it pricks and jobs so!"

ALIMENTIVENESS. She asked food immediately, and complained of pain in the organ, which she pointed out, exactly where it has been supposed to be located.

VENERATION. She was happy. Mr B. "With what?" "Oh! with nothing in *this* world. She could say much about another world. She wished to be seriously talked to, but Mr B., she said, was not serious."

WIT, as a contrast. Mr B. "Who am I?" Answer, "Tom Fool; but that is nonsense; I wish to be serious; speak to me seriously." Veneration was evidently not exhausted, and was too powerful for Wit.

TUNE tried. A long silence, during which she beat time with her hand on her knee and with her foot, and presently began to sing.

SELF-ESTEEM. Countenance became pettish, and she ceased her song, as if singing were beneath her. Mr B. "Why do you stop singing? You are a very poor singer." Ans. "I can sing much better than you." Mr B. "Who are you?" Ans. "Who am I? Your better, Sir." Mr B. "Who are your betters?" Ans. "I do not know *my* betters, or my equals; but I will not condescend to talk with such as you." Mr B. "Are you as good as the Queen?" (It was conditioned that when the organ was fairly manifesting itself, other questions might be put besides the two first settled). "I am better than the Queen, for I can support myself, and she cannot. She cannot make her bread by needlework,—she might by dish-washing. I should think it beneath me to be the

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Queen ; but I will give heed to no insulting questions ; I feel that I could wring her neck off." Mr Brookes here called our attention to the Destructiveness which Self-esteem always rouses.

BENEVOLENCE.—" How cruel I have been—very cruel—I am sorry for it—I would injure no one." Here tears were evident in the shut eyelids, and ran down the cheeks.

ALIMENTIVENESS was then mesmerised. Hunger was complained of ; *beans and bacon* were spontaneously called for, to the great amusement of all present who had been made aware, privately, of the scene at the first visit. She became very urgent for beans and bacon ; and I was afterwards informed by Mr Brookes, that, when awakened, the organ could not be quieted, and beans and bacon were actually procured, and were consumed to such an amount, that poor Sarah was ill for some days afterwards. Mr Brookes resolved never to rouse beans and bacon again ; the organ always acts morbidly in Sarah B.

THIRD VISIT.—The party as numerous as on the preceding occasion ; among them three young medical men. It was suggested that Mr Brookes should be blindfolded, and his hand guided to the organs by a phrenologist, of whom several were present. The object of this precaution was to prevent the possible effect of Mr Brookes's *will*, when he himself was aware of the organ to be influenced. I humbly thought it an unnecessary precaution, and predicted an irregular and uncertain effect on the organs,—a result which actually followed ; for, from the unsteadiness of the hand, it happened more than once that the neighbouring organ, without, not with, the one intended, responded.

The organs mesmerised were TUNE, WEIGHT, COLOUR, WIT, and VENERATION. The patient rubbed with her hand the spot of Tune, I think it was, and complained of pain there, as if a stocking-needle were thrust into it. After she had spoken much not connected with Tune, which was rather hastily considered by some of the gentlemen present,—who seemed to me disposed to regard the whole affair as imposture,—to be failure to excite that organ, the patient, without any fresh application of the hand, and without having heard a word which, had she been conscious, could have led her to suspect that Tune was expected to act, began to sing. Mr Brookes said that an organ mesmerised sometimes did not act immediately, but came out afterwards, and then occasionally in combination with others subsequently excited, but first manifested. WEIGHT was answered by the hypochondriacal perception of the head falling off, which " she feared would happen if she sung—for it hung

by a straw." COLOUR being mesmerised, she was asked of what she thought? when she answered, that she saw ribbons and rain-bows. When WIT was mesmerised, she answered to the usual question, that she felt very happy, in charity with every one, light-headed. It was, of course, observed by the sceptical gentlemen above alluded to, that she had not manifested the specific organ mesmerised. After some time, Wit not having been mentioned, she said, of herself, " Would it not be a good joke to take out my old teeth, and put new ones in their place? I mean without pain, for that would be the *fun* of it." She then made some observations which rather treated sacred things with levity, and made use of the word "*devilish*."

VENERATION was then mesmerised, when her manner became serious, and she said she hoped God would forgive her for having used the word "*devilish*," and for speaking of serious things with trifling expressions. Mr Brookes's hand, he being blindfolded, was led to LOVE OF APPROBATION. I observed the hand unsteadily applied as the patient sat close to the wall; and as he stood in front, he was forced to pass his hand over her head, and bend inward his fingers to affect the organ. It resulted that Love of Approbation was not manifested, but its neighbour Self-Esteem. This was called a failure. I thought it a very natural result of the unnecessary, and really unfair, blindfolding, and quite consistent with Mr Brookes's declaration, that a neighbouring organ to that intended is sometimes manifested.

On the whole, the trial of this day was not so distinct and satisfactory as the previous trials. The manifestations came out slowly and with some confusion; the success was partial. But to me, who had seen the two previous trials, the partial failure of that one was confirmatory of the good faith both of mesmeriser and mesmerised. The very presence of sceptical persons would, with impostors, have secured the most unerring *success* in every experiment.

FOURTH VISIT.—Eight or ten persons present; among these two of the three sceptical gentlemen, and with them another medical gentleman of eminence in London, who had not been present on the preceding occasion. The office of watchman or scrutinizer was given, by general consent, to this last-mentioned gentleman. He performed the duty rather rigidly, and Mr Brookes seemed to feel that his scrutinizer, as well as the other two gentlemen alluded to, looked upon both him and his patient as impostors. The scrutinizer wrote down a list of organs. The restrictions and conditions, or rather the manner of them, hurt Mr B. They were in themselves proper, with one

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exception, and that was an objection to his mesmerising the organ, when slow of answering, as often and as long as he liked,—a novel restriction, of which he justly complained; and, from much argument, or rather contention, about them, he was thrown into a state of feeling which mesmerisers would consider incompatible with the exercise of mesmeric power. Add to this, the patient was seriously unwell, and for some time few other answers could be drawn from her but complaints of headache. Mr Brookes had premised, before proceeding at all, that he did not succeed when his patient was suffering from illness. This he did with earnestness, and often repeated it; but neither his declaration, nor the patient's illness, seemed to me to be at all recognised by the three medical gentlemen as elements in their judgment.

WIT produced nothing.

SELF-ESTEEM. She answered only that her head ached. Mr Brookes said he expected no result as long as the head ached. She presently complained that a gentleman near her occasioned her headache; and became very cross, repeatedly threatened to stamp with her foot, and spoke in very contemptuous terms of those about her. These manifestations of Self-Esteem were, however, too equivocal to be of any value. Here the patient asked for water to remove her headache, drank it, and soon afterwards declared her head better.

CAUTIOUSNESS, excepting one or two hints about danger in travelling, also failed to produce any clear result. She made some remarks unconnected with Cautiousness.

TUNE was then mesmerised, and for a long time nothing came of the operation. The three medical gentlemen here rose to go away; Mr Brookes appealed to themselves and the company as to the fairness of leaving the trial incomplete, especially as they had themselves furnished a list of organs, a very few only of which had been tried. They replied that they could not spare more time. Mr Brookes answered, that much time had been wasted in disputing about the conditions, and protested against this incomplete and unfavourably circumstanced trial being held to be conclusive. During this discussion, which was carried on at the door of the room, the patient, left to herself, began to beat time gently on her lap with her hand, and on the ground with one foot. I saw this, for I had not for a moment taken my eye off her, so that a gentleman sitting by me did no more than shew me that he, too, saw the movement, by touching me, and silently pointing to it. Before the medical gentlemen left the room, the girl began to sing; but they refused their attention, alleging that the meeting was broken up, and they were no more on the

watch. I beg to state respectfully, that the meeting was not broken up. They, three in number, had risen to go away ; but there were others there who were willing to remain, and who did remain. I was one of them, and I can declare that I had never moved my eye from the patient, and that her manifestations, first of Time and then of Tune, were ultraneous, unhinted at, unprompted, and in circumstances of the most perfect fairness. Some words might have fallen from some of the spectators on the success of that experiment ; but I can confidently aver that these were not spoken before the marking of time, and also the singing, had commenced. I am thus specific and positive on this point, because I know that with the gentlemen in question the experiment on Tune, which all the rest of the company viewed in a different light, went for nothing.

FIFTH AND LAST VISIT.—Present, two medical men of eminence in London, and several other gentlemen, but none of the three medical gentlemen who witnessed the preceding trial. Sarah B. was that day in better health ; and Mr Brookes, feeling himself less obviously suspected, was in a better frame of mind. The guard was set with vigilance, one of the medical gentlemen doing the duty. The organs were never touched, and the hair was smoothed down.

TUNE, *after a very long time*, was manifested. Sarah of herself said she heard a Scotsman playing on his instrument ; this she had heard on the street some time before. She then began to sing, but without words. Mr Brookes mesmerised LANGUAGE, when she sang with words. She continued to sing, and it was difficult to stop her. VENERATION was excited, when the song became a hymn—she saying she was in chapel. She was mild and kindly till SELF-ESTEEM was roused, when she frowned and became proud and repulsive ; her language was self-sufficient, and she treated with great disdain a proposal of Mr Brookes, made *after* the pride was fairly active, that she should clean his boots. BENEVOLENCE changed the expression to mildness. She would clean Mr B.'s boots if no one else would ; she was happy, and wished all the world to be happy. COLOUR was then excited. The effect here was almost instantaneous. She said, "How light it is ; beautiful light ; green fields, hedges, and blossoms ; all like rainbows !" SIZE was tried, but WEIGHT, its more excitable neighbour, answered, with morbid strength as usual, "I am sinking through the floor, just where I sit—I am a log of lead. Don't put your hand under mine ; it will crush it with its weight."

this question, I assume as well-founded the statements of magnetisers, that by acts of volition alone they can call forth particular kinds of mental manifestations ; and I merely wish to call their attention to the inference that, assuming this to be the case, the proof of the situations of the organs, supposed to be afforded by these instances, fails. I am, &c.*

GEORGE COMBE.

[We have been favoured with communications on the same subject by Drs Buchanan and Caldwell of Louisville, Dr Andrew Boardman of New York, and Mr W. H. Partridge of Birmingham. A report of similar experiments performed at New York in December and January last, is published in the *American Phrenological Journal* for February, p. 46. Mr O. S. Fowler, the editor of that journal, was present, along with the Rev. Mr Sunderland and Dr H. H. Sherwood. The subject is resumed in the No. for March, p. 81, where some account is given of the supposed discovery "that every organ of the body and brain has a certain magnetic connexion with the face, or a place there for its indication." In the No. for June, p. 155, is inserted a letter from Dr Buchanan, in which he says that his experiments are unconnected with Mesmerism—having been made, not upon subjects in a magnetic or somnolent condition, but solely upon persons in their natural state. He farther announces, that he is preparing for the press a work designed to illustrate the new science, which he believes himself to have discovered, and which he designates by the term *Neurology*. In his communication to us he has given merely the results of his investigations, some of which are so strange and apparently incredible, that, before publishing it, we think it judicious to wait for his statement of the facts on which they are founded. His mode of operating is still undivulged. As to the subject of Mr Combe's remark, see pages 356 and 375 of our present number.—ED.]

II. NOTICES OF BOOKS.

- I. *Letters from Hofwyl, by a Parent, on the Educational Institutions of De Fellenberg.* With an Appendix, containing Woodbridge's Sketches of Hofwyl, reprinted from the "Annals of Education." London: Longman & Co. 1842. Pp. 372.

The writer of this volume, known to us to be Mrs Barwell of Norwich, has therein given to the world just such a graphic, instructive, practical, and feeling account of the celebrated

* Mr Brookes answers this question, see page 356, First Visit.—ED.

always witnessing the corresponding results. The effect of the changes suggested to my mind that of playing on a musical instrument. That Dr Elliotson was either deceiving or deceived I had not the slightest belief.

I am aware that you are in possession of information from America of mesmeric experiments on the cerebral organs by Drs Buchanan, Caldwell, and Boardman—each acting independently of the other two—the results of which are even more striking than any that have been observed in this country. But this is not the time or place to adduce them.

The investigation is one of vast importance; and, cautiously, extensively, and independently carried on, may confirm one of the most valuable discoveries yet known to science. I am,
&c.

JAMES SIMPSON.

V. Mesmero-Phrenology in America.

TO THE EDITOR OF THE PHRENOLOGICAL JOURNAL.

ISCHL IN AUSTRIA, 22d August 1842.

SIR,—I have just received the accompanying interesting letter from Philadelphia, dated 13th May 1842. The writer of it, and also the gentleman who performed the experiments, are distinguished physicians of that city, and the subject of them is a literary man of much talent. The high character of all the three, who are known to me personally, leaves no doubt in my mind of the *good faith* in which the experiments were performed.

As I am not certain that my friend intended the letter for publication, I request of you to suppress the names.

“I found that I had not room in the body of my letter to tell you of an extraordinary exhibition of which I have been, in common with four or five other persons, a witness within these few weeks. The place was Dr ——’s office, the operator Dr —— himself, and the subject or person impressed by him Mr N——, editor of the ——, whom you saw, perhaps had some acquaintance with, when you were here. The other parties (Dr —— and his invited friends) were met at about 8 p.m., when Mr N—— entered. After a brief conversation, Dr —— being seated, and leaning his head on one hand, gazed fixedly at Mr N——, who was seated within a few feet of, but not directly facing, the Doctor. In a few minutes, not more than three, Mr N——, who was sitting at his ease, let his head fall as one would do who has just gone to sleep. Dr —— now rose, and approaching Mr

One of the medical gentlemen is a professed phrenologist ; but, as he has no belief in the mesmeric state, the experiments could prove nothing to him. The other hinted that the patient, supposing her deceiving, might have learned a settled series of organs. But this could not be, when, as in the case before him, the organs were named by himself, or any other third party.

Greater strictness of observation by the sceptics than the well-wishers was also adduced, as accounting for the failure of the fourth day's trial. To this I answer, that, although there was considerably more form on that day, the scrutiny of the first two days, when I was myself the watchman, did not yield, in essential care and strictness, to that of the third, fourth, and fifth. If it be alleged that the wishers of success admit too easily, may there not be an over-zealous scepticism which rejects too easily ? Considering the illness of the patient, the irritation of the mesmeriser, and the premature departure of the scrutineers, it would, I humbly think, be an instance of such rejection, were the fourth trial above narrated to be held conclusive. The medical gentleman who watched the fourth trial is well entitled to my high respect. I know him well, and am proud of his friendship ; and I feel assured that he will take no offence when I say, that it appeared to me that he too easily rejected as worthless the manifestation of Tune, which was proceeding when he was leaving the room. I repeat, that that organ was successfully mesmerised in perfectly fair circumstances ; and I should have thought so, even although I had not seen it manifested on other occasions, and received assurances, to which I give full credence, that it had been excited to manifestation, by mesmeric influence, elsewhere and by other persons, both in England and America.

I had written a full detail of an experiment on the cerebral organs by Dr Elliotson, which he allowed me to witness, but am forced to withhold it for the present, as this letter is already too long. The subject was a young woman whom he had long mesmerised for epilepsy, and only recently thought of subjecting to experiment on her cerebral organs. He assured me that she knew nothing of the organs. He mesmerised without touching, and completely succeeded with three of them—Adhesiveness, Self-Esteem, and Destructiveness. She grasped his hand when the first was excited, with a mild expression ; relaxed her hold, and poutingly tossed his hand away, when the second was roused, becoming cross at the same time ; and was extremely angry when it was the turn of the third. I was allowed to choose the *order* of excitement, which I did indifferently, changing it again and again, and

always witnessing the corresponding results. The effect of the changes suggested to my mind that of playing on a musical instrument. That Dr Elliotson was either deceiving or deceived I had not the slightest belief.

I am aware that you are in possession of information from America of mesmeric experiments on the cerebral organs by Drs Buchanan, Caldwell, and Boardman—each acting independently of the other two—the results of which are even more striking than any that have been observed in this country. But this is not the time or place to adduce them.

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N——, put his finger, in succession, on parts of the head of the latter corresponding with some of the phrenological organs. The effect was to elicit the expression, by natural language, of the activity of these, and a kind of muttering or chattering sounds. Dr —— then applied his finger to, and gently rubbed, the lower part of the eyeballs, and immediately Mr N—— began to speak. Almost immediately afterwards, the region or spot externally, corresponding with the cerebral organ internally, was touched ; and from that time to the end of the exhibition, whenever an organ was appealed to, by the Doctor applying his finger to the part, the faculty was manifested in an energetic manner, both by speech and gesture, or natural language. It was not a little amusing for us to see the lofty air of Self-esteem, and expression of contempt for others, quickly succeeded by the sneaking and deferential manner and language of Vanity, the endearing expressions and gestures of Love of Children, the animation of Adhesiveness, the rude boisterousness and preparation for fight of Combativeness, the mimic drawing of bowie knife and reckless disregard of life of Destructiveness, when Doctor —— touched with his finger the several portions of surface of the head corresponding with the organs of these faculties. In like manner were developed, and with great vivacity of expression and manner, the manifestations of the faculties of Tune, Colour, Order, Weight, Form, and Locality. Mr N——, who is very fond of music, imitated various sounds—as of the horn, and the movements of rapid and emphatic fingering of, and as if sweeping over, the piano ; and at last, so great was his delight, that he exhibited it by sundry odd gestures, one might say contortions, with accompanying vocal sounds. Causality and Comparison were each brought into play, as was also Ideality. The extreme timidity of Secretiveness [Cautiousness?] was manifested to almost a painful extent. But most extraordinary was the simultaneous manifestation of two faculties of very different natures, such as of Covetousness and Conscientiousness, or of Combativeness and Conscientiousness. Under the impulse of Combativeness he was raised on the ground, had, in idea, a dagger drawn, and threw himself into a most menacing attitude ; when, on Conscientiousness being touched, his whole manner underwent a change : he drew his before extended and uplifted hand quickly to his breast, thrust away then rapidly his supposed weapon, and buttoned up quickly his coat. The gradual unfolding of the feeling of Acquisitiveness, from the moment when he first saw something in view, bags with strings twisted round them, and his knowledge then of their contents, with a desire of possession, up to

an appeal to his companion, whom he supposed to be present, whether they could not without danger appropriate the money to their own use, was a natural and fine piece of acting, if we were to regard it in that light. So, also, was his quickly dropping the money, and his expressions of misgiving at the act when Conscientiousness was touched. Alimentiveness was also affected by the finger being placed under the zygomatic arch, and it responded in decided language and gesture. I felt considerable curiosity to see the natural language of Concentrativeness, the organ of which Dr —— did not, at first, accurately touch. When he did, Mr N—— threw himself into a most singular attitude—head down on his shoulders, but leaning forward, arms and hands brought together and somewhat extended, and one of the hands moved as if to represent the penetration and twisting of a cork-screw. Mr N—— said that he remembered much that had transpired in his magnetic state. His manners and deportment are reserved; and he is quite diffident and averse to exhibition, and to practical jokes or rough mirth of any kind—though under the influence of some of the faculties in his trance he was not so quiescent. Similar experiments have been made, and with analogous results, on thirteen persons, of ages from 13 to 50, in this city, in both sexes, mostly by Dr ——; but in the case of a young lady (who, by the way, had never read, nor studied, nor cared about Phrenology), by Mr C——, a son of the clergyman. The experiments so far, while they singularly confirm the leading principles and details of Phrenology, point to a much greater division and multiplication of faculties than before. Dr —— proposes to send to you (in Edinburgh), *via* Liverpool, a cast of Mr N——'s head, with the new organs marked on it. Dr Buchanan of Louisville was the first to institute experiments of this kind, last winter. Some of his were on persons awake. Dr —— has had repeated sittings since the one I describe, and with similar, and even sometimes more diversified results. Ladies have been present at some of the meetings."

One remark on this and similar cases has been suggested to me by a friend. It has frequently been reported that the magnetiser, by a mere act of his will, can command the thoughts and feelings of the magnetised, without actually touching or approaching his person. In the present case, the magnetiser must have *willed* that the magnetised should manifest particular faculties; for such acts of the will, we may suppose, were the natural preludes to his touching the situations of the organs. May not the manifestations have proceeded from these acts of volition, and not from physical excitement, through touch, of each particular organ? In putting

this question, I assume as well-founded the statements of magnetisers, that by acts of volition alone they can call forth particular kinds of mental manifestations ; and I merely wish to call their attention to the inference that, assuming this to be the case, the proof of the situations of the organs, supposed to be afforded by these instances, fails. I am, &c.*

GEORGE COMBE.

[We have been favoured with communications on the same subject by Drs Buchanan and Caldwell of Louisville, Dr Andrew Boardman of New York, and Mr W. H. Partridge of Birmingham. A report of similar experiments performed at New York in December and January last, is published in the *American Phrenological Journal* for February, p. 46. Mr O. S. Fowler, the editor of that journal, was present, along with the Rev. Mr Sunderland and Dr H. H. Sherwood. The subject is resumed in the No. for March, p. 81, where some account is given of the supposed discovery "that every organ of the body and brain has a certain magnetic connexion with the face, or a place there for its indication." In the No. for June, p. 155, is inserted a letter from Dr Buchanan, in which he says that his experiments are unconnected with Mesmerism—having been made, not upon subjects in a magnetic or somnolent condition, but solely upon persons in their natural state. He farther announces, that he is preparing for the press a work designed to illustrate the new science, which he believes himself to have discovered, and which he designates by the term *Neurology*. In his communication to us he has given merely the results of his investigations, some of which are so strange and apparently incredible, that, before publishing it, we think it judicious to wait for his statement of the facts on which they are founded. His mode of operating is still undivulged. As to the subject of Mr Combe's remark, see pages 356 and 375 of our present number.—Ed.]

II. NOTICES OF BOOKS.

- I. *Letters from Hofwyl, by a Parent, on the Educational Institutions of De Fellenberg.* With an Appendix, containing Woodbridge's Sketches of Hofwyl, reprinted from the "Annals of Education." London : Longman & Co. 1842. Pp. 372.

The writer of this volume, known to us to be Mrs Barwell of Norwich, has therein given to the world just such a graphic, instructive, practical, and feeling account of the celebrated

* Mr Brookes answers this question, see page 356, First Visit.—Ed.

institution and system of Hofwyl, as, from what we know of that lady's head and heart, we should have expected from her pen. With the enlightened concurrence of their father, she has committed all her boys, five in number, to the care of M. De Fellenberg; and it was on the occasion of a late visit by both parents paid to their children when actually engaged in the studies, exercises, and pleasures of Hofwyl, that the delighted mother wrote these letters, which have a vividness and warmth of heart about them almost enthusiastic. Our chief object in noticing the volume is to recommend it to our readers. They will find in it, agreeably blended, the tourist's liveliness and buoyancy, and the philosopher's solidity and soundness. Above all, they will find, and, if they are parents, they will sympathize with, the kindest flow of parental affection towards the children; and admire, and we trust profit by, its subordination to a sober, well-regulated, self-denying care for their true welfare, which indicates a mind of no ordinary character.

After devoting a letter or two to a general account of De Fellenberg's system, the writer describes her arrival at Hofwyl,—meeting with M. De Fellenberg—the first evening—the first morning—the scholastic and domestic arrangements—the working of the system as actually witnessed—the Sunday at Hofwyl—the instructions—the exercises—the amusements, all as actually going on; so that, bating the condition of ocular consciousness of the scene, to read this book is *to be* at Hofwyl, and that under the guidance of an intelligent well-informed conductor. The seventh letter is especially full of instruction. We wish we had space to extract it entire; we give its commencement as a specimen. “Perhaps the most striking part of the Hofwyl education is the moral training. M. de Fellenberg has not regarded *education* as *instruction*: he considers the life of man as a long course of education, a preparation for hereafter; and he regards childhood and youth as the period when the mind and character are to be submitted to an especial control, to a direction which shall surround the individual with moral influences, and protect him from all that has an opposite tendency. The systems of reward and punishment, common to the prevailing systems of education, are not the means adopted by M. de Fellenberg. Every thing at Hofwyl is arranged so as to tend to one and the same object, i. e. *moral influence*. There is a protection from evil, and a guidance towards what is good, which, though unseen and unacknowledged by the inexperienced pupils, is gradually and continually producing effect upon character and conduct. The principles which have guided M. de Fellenberg are founded upon the nature of man, his connection with external

nature, his relations with his fellow beings, and his immortal destiny. Acknowledging the existence of certain faculties, he regards their development as a duty imposed upon the educator by the Creator, who formed them, in his infinite wisdom and benevolence, for the production of good. He looks upon mankind as one great family, wherein the individual benefit cannot be separated from the general welfare ; and he acts on the principle, that, by *individual* amendment, the *general* reformation will be secured. At Hofwyl, therefore, we find provision made for the development of every part of human character combined into one great whole ; the intellectual advancement strengthening the moral progress ; the religious and moral virtues sanctifying, supporting, and adorning intellectual strength ; while the physical powers are fortified and confirmed, in order that the moral and mental forces may effect their purposes with all the vigour of a healthy action. While every means is adopted to establish a moral influence, the *exclusion* of every influence tending towards evil is carefully aimed at. M. de Fellenberg considers the powers of children as weak, and endeavours to apportion their trials and temptations to their powers of forbearance and resistance. They are guarded from vice and impurity, and from all familiarity with what may corrupt the heart, undermine principle, or deceive the judgment,—from all the sophisms and deceitfulness with which vice or self-indulgence deceives the unsuspecting and the inexperienced ; but he does not desire to shut out all experience of the consequences of error. You will perceive that I allude to the distinction between external influence and internal impulse. The former, if evil, is shut out as much as possible, and thus the latter is less difficult to regulate. In the conversations I have with him he makes frequent allusions to the necessity of patiently bearing with the repetition of the same fault, and of the advantage of continual representations on the same subject—on *apprendre à marcher en tombant* ; and so must it be with the moral advancement. The value of patience and hopeful perseverance is inestimable in the educator."

After some valuable observations on the regularity and certainty of all the arrangements at Hofwyl, the author says : " I need scarcely observe that the association of different minds will have an effect upon character, or that the communion between the pupils must tend to produce circumstances which lead to experience. While the watchfulness exercised over conduct and conversation extends to the prevention of whatever can injure, morally, mentally, or physically, it does not shut out those exhibitions of natural feeling which, when judiciously treated, are all helps in education. In the little world of Hofwyl, the weaknesses and defects of character, the

pride, the vanity, the tyranny, or the selfishness of human nature, shew themselves in some of their numerous forms ; but they are converted into engines of ultimate benefit. To direct, to guide, to form—not to crush and eradicate the original character, is, according to M. de Fellenberg, the part of the educator. The qualities of every mind are bad only when excessive or defective, or relatively ill-balanced. An excess of firmness is obstinacy ; a deficiency, infirmity of purpose. Excessive prudence degenerates into timidity ; a want of it, constitutes rashness. Self-respect may rise into pride, or fall into a loss of the self-confidence necessary to success. Natural character cannot be eradicated, but faults may be kept in subjection by the predominance of better feelings. The influence of public opinion is often an aid to better motives. At Hofwyl, therefore, character is allowed to display itself, and to have its effect. Thus the tyrannically disposed will be known, even though the weak are protected from the evils of tyranny ; the passionate, the timid, the idle, the discontented, the conceited, manifest their several dispositions, and sooner or later find their true place in the estimation of their fellows. Yet such qualities are not made obvious by the treatment of the masters, as you will see when I come to speak of punishment.”

The author succeeded in tracing the malicious misrepresentations of Hofwyl as a seminary of over severe and tyrannical supervision, to the *mauvais sujets*, the bad boys, in the establishment, who, coming to it “ruined” from schools on the old system, were necessarily subjected to more strictness, but not more than called for, than their better conducted school-fellows. The author’s observations (page 104 to 106), on the ridicule, deceit, and hatred directed against their teacher, by boys in common schools, too often abetted by their parents, are of great practical value. She learned that “few English boys came to Hofwyl free from such mischievous sentiments towards the profession and character of an educator.” These, if advanced in age, are often so dangerous, as to render it imperative to refuse, or, if taken, to send them away. But, she adds, this is done without *expulsion*, and often so quietly, that the unfit pupil himself often believes that his parents have voluntarily removed him.

In the fourteenth and last letter, the writer exposes in justly severe terms, the neglect, and even obstruction, with which De Fellenberg’s noble system has been treated by the Government of the Canton of Berne ; of which, nevertheless, it is the chief ornament in the eyes of the most enlightened men in Europe. In reading her comments, we cannot avoid the reflection that the governors of the Canton would themselves be greatly benefited by a regular course of training and instruc-

tion at Hofwyl; and that the Bernese youths actually trained and instructed there, will, when men, make much better governors of the Canton than any under whom it has yet been.

We must content ourselves with recommending the "Sketches of Hofwyl," by M. Woodbridge, which form the appendix, to careful perusal. The author of the volume did well to reprint that work, as a valuable educational treatise.

There are two things about Hofwyl which we always regret. The one is, that infant-education is passed over in silence, as if it had no place in the things that are. We are aware that a preparatory infant-school could with difficulty be established and kept up, in, or in relation to, an institution resorted to from many distant quarters, and not drawing its supply of pupils, like a day-school in a town, from the neighbourhood. Hofwyl could not easily have an infant-school as the first stage of its curriculum. But it ought expressly to recognise and strenuously recommend infant-education, and profess to build upon it as a foundation. By doing so, it would not only incalculably benefit itself, but would indirectly promote by far the greatest improvement in modern education, if it made it a condition, at least a facilitation, of admission, that the young candidate had been previously trained in a well-conducted infant school.

The other subject of our regret is, that Phrenology seems not to be recognised, much less acted upon and taught, at Hofwyl. If Phrenology be the true science of mind and man, this must be a serious and hurtful omission. It is not a satisfactory answer that all that is excellent in Hofwyl must stand a phrenological test, as being essentially a right direction of the faculties. True philosophy is not contented with availing itself of results and effects; it includes causes, a knowledge of which is essential to the right systematic use of results. Besides the clear practical analysis of the faculties which the science furnishes, and without which there can be no precise and consistent guidance of them to their legitimate objects—another word for sound education—the loss is not small to the teacher who omits to confer on the pupil that accurate self-knowledge which an introduction to his own brain would give him—an introduction itself more than half the work in the formation of his character.

M. de Fellenberg is old, has done well without Phrenology, and feels it too late for him to study and apply it. If this should be his answer, we leave him, in his own person, to the full benefit of it; but it will not do for the *future* Hofwyl to continue to shroud itself in the same apology. It has complained of the obstructive operation of prejudices; let not itself foster one which, in its extent of evil, leaves most other prejudices far behind.

II. *Cerebral Physiology and Materialism, with the Result of the Application of Animal Magnetism to the Cerebral Organs. An Address delivered to the Phrenological Association in London, June 20. 1842.* By W. C. ENGLEDDUE, M.D. *With a Letter from Dr ELLIOTSON on Mesmeric Phrenology and Materialism.* London : H. Baillière. 8vo. Pp. 38.

Dr Engledue states in his preface, that, since the publication of his Address in the *Medical Times*, several correspondents have requested him to publish it in a separate form. "At the meeting of the Phrenological Association," he adds, "the avowal of Materialism—the inevitable inference from the facts of Cerebral Physiology—excited considerable hostility. This spirit of antagonism prompts me to yield to the wishes of my friends. A writer of talent, speaking of 'Phrenologists,' states, in a communication to me, 'the mass either cannot follow out the consequences of their own doctrine, or they have not the honesty or the courage to avow them.' This is the *fact*, however unpalatable the announcement. The doctrine promulgated in the following pages, I leave to the consideration of those who acknowledge that 'honesty is the best policy,' and who act on the principle that it is *always* expedient to speak the truth."

We have much respect for Dr Engledue, who is a man of talent and worth ; but really the cool manner in which he distributes all who differ from him into the three classes of fools, knaves, and cowards, is somewhat amusing. If it is always expedient to speak the truth, surely some difference of opinion may nevertheless be allowed as to what *is* the truth.

Dr Elliotson's Letter describes the phenomena produced by mesmerising different organs in his two patients alluded to by Mr Simpson, on page 364 of our present Number. At first he used to touch the head, but afterwards found that activity of the organs ensued, though not so rapidly, by merely pointing the finger near them. "But a fact still more wonderful is this. The state of the organ of one side gives evidence of itself on only half of the system. For instance, if I place my fingers in the patient's right hand, and mesmerise Attachment in the *right* side, she squeezes them and mistakes me for a dear friend ; if I then mesmerize Self-esteem, on the *left* side, she still speaks to me kindly, and squeezes my fingers with her right as much as ever. But if I place my fingers in her left hand, she repels them, and speaks scornfully to me, mistaking me for some one whom she dislikes. If I take hold of both her hands with one of mine, I can at pleasure make her repel both, by pointing over each organ of Self-esteem or Destructiveness ; squeeze both, by pointing over each organ

of Attachment ; or repel one and squeeze the other, right or left, accordingly as I point over the organ of Self-esteem or Destructiveness on the one side and that of Attachment on the other, at the same time. These simultaneous, and especially the opposite, influences on the two sides, are the most astonishing and beautiful experiments that all physiology affords ; and the sight of them enraptures every person. They are the more satisfactory, because there is no necessity for me to operate ;—any person, even a sceptic in both Phrenology and Mesmerism, may point to and mesmerize her respective cerebral organs himself, if standing behind her. Under the opposite states of the two sides of the brain, she will address the person supposed on the one side or on the other, and speak affectionately, proudly, or angrily, as Attachment on the one hand, or Self-esteem or Destructiveness on the other, is mesmerized. The expression, the tone, to say nothing of the words or the action of her hands, are exquisitely and rapidly in character." In another patient, "the organs at present can be excited by contact only of the point of the finger, or by breathing over them. Attachment, Self-esteem, Destructiveness, Music, and Colour, I have excited in him, and the effects come very slowly and continue long."

If it should be urged that such experiments prove nothing for Phrenology, because the excitement of certain ideas in the brain of the patient resulted from the mere will of the operator, and not from his manipulations over particular cerebral organs, Dr Elliotson answers, that although, if it be true that a mesmeriser can mesmerize to sleep a patient at a distance, the will of the operator must certainly be influential, yet this can be only one source of power, for in not even one among his innumerable experiments has he ever once discovered the influence of his will. "I have never produced," says he, "any effect by merely willing : I have never seen reason to believe (and I have made innumerable comparative experiments upon the point) that I have heightened the effect of my processes by exerting the strongest will, or lessened them by thinking intentionally of other things, and endeavouring to bestow no more attention upon what I was about than was just necessary to carry on the process. So far from willing, I have at first had no idea of what would be the effect of my processes,—one set of phenomena have come *unexpectedly* in one case, and one in another, without my being able to explain the diversity of effect : nay, the same process, *conducted with the same object*, turns out to produce opposite results in different cases. As to the influence of the operator's will in exciting the *cerebral organs*, the effect ensues as well in my female patient though the manipulator be a sceptic-

tic, and may, therefore, be presumed not to wish the proper result to ensue, and though I stand aside and do not know what organ he has in view : I have never excited them by the mere will : I have excited them with my fingers just as well when thinking of other matters with my friends and momentarily forgetting what I was about : I have always failed, however much I willed, when I have directed the finger to another organ than that which I willed to excite intentionally, or have accidentally misdirected my finger : I was taken quite by surprise when I found that I mesmerized an organ, Self-esteem for instance, in the half only to which my finger happened to be pointed." Dr Elliotson concludes his lively epistle by arguing that materialism is nowise worthy of reprobation ; in support of which position he cites Locke, Paley, and Bishop Watson. "Hoping, as I do," says the last named writer, "for eternal life through Jesus Christ, I am not disturbed at my inability clearly to convince myself that the soul is, or is not, a substance distinct from the body." The Bishop, it would seem, was modest enough to remain in doubt whether the soul *is not*, as well as whether it *is*, a distinct essence.

III. *Observations on the Admission of Medical Pupils to the Wards of Bethlem Hospital, for the purpose of Studying Mental Diseases.* Second Edition. By JOHN WEBSTER, M.D., one of the Governors. London, 1842. 8vo.

We strongly recommend the careful perusal of this brief pamphlet to all the Directors of Lunatic Asylums throughout the country. Its object is to induce the Governors of Bethlem Hospital to admit pupils, under certain regulations, to visit the patients along with the attendant physician, and to require the latter to deliver courses of explanatory lectures on the nature and treatment of the disease. Facilities of study of this kind are greatly wanted, and Dr Webster deserves much credit for his exertions to procure them for the students of the metropolis. At present the profession are, generally speaking, disgracefully ignorant of the subject ; and as they have never had the means of studying it, their ignorance is more to be lamented than wondered at. We are happy to be able to announce that the Directors of St Luke's in London have taken the hint, and agreed to admit pupils to their wards and institute lectures. Dr Conolly at Hanwell has already set a good example in the same way, and we trust that ere long it will be followed in all the public asylums near our medical schools.

IV. *True and False Phrenology. Reprinted from No. XXVII, of the British and Foreign Medical Review (July 1842). London: Churchill. 8vo. Pp. 16.*

The very able, opportune, and philosophically written article, of which this brochure is a reprint, has, in the medical journal from which it is extracted, the form of a review of Dr Carus's "Principles of a New and Scientific Cranioscopy," a notice of which work appeared in our Number for April last. The reviewer says of it, and amply supports his judgment—"We cannot refrain from expressing our surprise and regret that a man possessing a good reputation as a human and comparative anatomist, like M. Carus, should have identified his name with a series of propositions so thoroughly unscientifically based as those contained in the present production." But the greater part of the article is devoted to the excellent purpose of indicating in what respects the cultivators of Phrenology are apt to fall short of the character of scientific men, and of suggesting improvements in their methods of proceeding. "There are few sciences," says the writer, "which have not suffered disfigurement, and whose progress has not been seriously retarded, by inaccurate observation and hasty generalization; and it was *a priori* to have been expected that Phrenology, however true in its foundation, should, in the erection of the superstructure, be subjected to the same hinderances and causes of misapprehension, to the same admixture of inaccuracy and imperfection in the detail, and to the same confusion of mere hypothesis with true logical deduction, as more or less happens to almost every science, especially when in its infancy, and when struggling for general recognition. We conceive, indeed, that this has been the case with Phrenology to a more than ordinary extent; and to this cause we mainly attribute the great backwardness shewn in so many instances by scientific men to a fair and candid examination of its true merits. We propose in the present article, before referring to the work with whose title it is headed, to offer a few remarks upon the present state of Phrenology *as a science*—as an accumulation of facts developing principles—upon some of the causes which, in our opinion, have retarded its progress *as a branch of physiology*—and upon the necessity of its being prosecuted more in the spirit of a true inductive philosophy than has hitherto been exhibited by many of its more enthusiastic and popular expounders, if it is to emerge from its present infantile condition, and to obtain the bold and defined outline of a well-matured science, commanding, not

soliciting, the attention of those to whom its truths are of practical importance."

It is unnecessary for us to say more about the contents of a pamphlet so accessible to all. The author evidently possesses an intimate knowledge of the subjects discussed, and has pondered well what he writes. On some points we think his statements questionable, or too strongly expressed; but at present we have neither room nor leisure to go into details. The article is highly creditable to the journal in which it originally appeared, and we trust that phrenologists will extensively read and study it, and imbibe the accurate and cautious spirit which it inculcates.

III. INTELLIGENCE, &c.

Germany.—It will be seen, from an article in this Number of our Journal, that Mr Combe has satisfactorily concluded his course of lectures at Heidelberg. He seems to have made an impression on men whose knowledge and judgment qualify them to form a just opinion of Phrenology, and to contribute towards the removal of its defects. We are informed that Professor Teidemann did not attend the lectures, but received Mr Combe personally in a very cordial manner, and lent him specimens from his anatomical collection. Mr Combe presented him with about twenty casts of national skulls, for which he offered casts of any skulls in his collection in return. Tiedemann was and is strongly opposed to Phrenology. Der Freiherr von Reichlinn Meldegg, professor of Logic, did not attend any of the lectures; and, while some of the medical professors were subscribing the address to Mr Combe, he was busy casting ridicule on Phrenology in his lectures. As he has published his objections in the text-book for his class, we may hereafter notice them. In Germany, as in Great Britain, every professor of Psychologie has his own theory of the human mind, which he cannot afford to sacrifice at the shrine of Nature, but which he must defend at all hazards against Phrenology, which threatens to sweep the errors of them all away.

In our late notice of Mr Noel's *Principles of Phrenology*, published at Dresden in 1841, it was mentioned that, at the instigation of the heads of the medical faculty in Prague, the circulation of the work had been prohibited by the Austrian Government. Mr Noel now requests us to state that the prohibition has since been *recalled*. He sent a petition to the Minister of Police in Vienna, together with a copy of his book, begging that it might be submitted afresh to censorship; and the result is, that it may now be circulated freely in the Austrian dominions. This is creditable to the Government, and it gives us much pleasure to record the fact.

There has recently been published at Leipsic, a work entitled "*Theorie der Verbrechen auf Grundsätze der Phrenologie basirt, von Dr Attomyr: Leipzig, bei Georg Wigand, 1842.*" (*Theory of Crimes founded on the Basis of Phrenology, by Dr Attomyr*). A notice of this work will appear in our next Number.

We have lately perused a clearly written German work, entitled, "*Researches on the Nervous System, by Dr Julius Budge: Frankfort-on-Maine, 1841.*" He operated on living animals, and his cruelties have sometimes made us shudder almost to sickness; but he brings out seemingly

important views, which, however, may prove to be ill-founded theories. He finds fibres of feeling and fibres of motion in all parts of the spinal marrow; but they are *collected*,—those of feeling at the back, and those of motion at the front. There are distinct fibres for flexion and for extension of the muscles, in the spinal marrow. The whole nervous fibres for voluntary motion unite in the medulla oblongata, and they end in the *pons*, and have all *crossed* by the time they reach the pons. Irritation of the pons and all below produces convulsive movements; but irritation of the cerebellum produces no convulsions; it is attended only with incapacity to execute regulated movements. For regulated motion, executed by means of extensor and flexor muscles, there must be, first, an *exciting* power, and, secondly, a *restraining* power. It is the *balance* of the two that produces regulated action. The same cerebral parts cannot both *excite* and *restrain* at one and the same time. The hemispheres supply the exciting power; the cerebellum supplies the restraining power. When Flourens removed the hemispheres, the animal lost all voluntary exciting power; it sat like an unconscious automaton; when he removed the cerebellum, it could run, but not with regulated steadiness. When one side of the cerebellum is cut through, the restraining power on *one* side is withdrawn, while the restraining power of the other is left entire. The animal can execute regulated movements with *one side*, and not with the other; it therefore necessarily *turns* round, moving only towards the suspended side, when it means to go forward. These results the author produces at pleasure by experiments on dogs, cats, rabbits, &c. Farther, the cerebellum is the central end also of the nerves which go to the organs of reproduction. By irritating it, in a male cat, he caused the testes to move strongly. The nerves of motion of the uterus also end in the cerebellum. The central termination of the nerves of motion of the bladder is in the cerebellum. The nerves of the rectum end there also. The nerves which occasion the movements of the intestines arise in the corpora striata, go through the corpora quadrigemina, thalami nervorum optico-rum, and cerebellum, into the medulla oblongata and spinal marrow; lie chiefly in the front layers of the spinal marrow, go through the ganglia of the N. sympathicus, and end in the muscular covering of the intestines. Irritation of the right thalamus and left corpus striatum produced motion in the stomach; no motions in it follow from irritating the brain itself. The nerves of the stomach go through the cerebellum, but do not end there. The cerebellum has no effect on the heart's action. The heart is moved by the brain's influence, but, in consequence of having no connection with the cerebellum, the brain cannot stop its motions. Thus, the brain uses the cerebellum as its instrument for stopping action: all functions may be *moved* by the brain, but none can be stopped unless their nerves end in the cerebellum. Stopping is essential to *voluntary* motion: Hence all nerves of voluntary functions have ends in the brain for motion, and ends in the cerebellum for restraint. If irritation is applied to the foot of a decapitated frog, it withdraws the foot. The explanation is, that the irritation is discharged by the nerve of feeling into the nerve of motion in contact with it in the spinal marrow, and the nerve of motion produces flexion of the muscles, all without consciousness. The hemispheres send an irritation (called Will) to the nerves of motion, and they act. Will can stimulate to motion, but it needs the cerebellum to stop it. Such are the views of Dr Budge. His book is logically written, and extremely condensed; but it is subject to two objections; 1st, The running and ending of fibres is described, not from seeing them, but from inference that, from the effects produced, they *must* run as described; and, 2dly, his views are not complete—he needs much metaphysical reasoning to produce agreement among the phenomena observed. Dr Budge intends to continue his researches.

Liverpool.—In July last, a long and stormy discussion on Phrenology took place here, in the Portico, between Mr J. Q. Rumball, lecturer on Phrenology, and Mr Brindley, a professional disputant, whose name has previously been mentioned in our pages. We disapprove of such gladiatorial exhibitions, even when conducted with more judgment than Mr Rumball is reported to have displayed, and above all, when phrenologists condescend to encounter opponents who care for nothing but victory and gain, and exhibit neither candour nor a courteous deportment. Two committees were appointed, one on behalf of each party, and Dr J. S. Thorburne was called to the chair. As usual, the inequality of thickness of the skull was the most prominent objection brought forward. Mr Rumball having undertaken to examine the heads of six boys, and write down the mental qualities indicated by them, a joint deputation from the committees (we quote from a letter by Dr Thorburne to Mr Rumball, published in the *Liverpool Chronicle* of 23d July) "succeeded in obtaining a competent schoolmaster to select and supply, of his own uninfluenced accord, six boys (the number mutually agreed upon) for open examination by you in presence of both committees. This was done. When you were committing to paper the developments of the fourth of the six boys, five lads entered the room. One only of this lot you reluctantly acceded to examine, grounding your objection so to do because of the possibility of some tampering or private understanding having been resorted to; and at any rate, because of their selection not having been made at the solicitation of a *joint committee*. While you were taking down the developments of the boys openly in presence of Mr Brindley, Mr Crisp, and your opponent's committee, he (Mr Brindley) was continually talking to and at you. Every one of Mr Brindley's committee must have noticed this, as I complained of it audibly and repeatedly, and also blamed you for suffering your attention to be in any way diverted from what required the closest concentration of mind, to enable you to do common justice to your own reputation, and to the practical part of the science in which you believe and profess. What Mr Brindley's object was I cannot know: it is enough for me to bear witness to facts." On the last of the five nights of the discussion, the sealed papers containing Mr Rumball's inferences, and the characters of the boys by Mr Jones of the Moorfields School, were produced to the meeting. "When the seals were broken," continues Dr Thorburne, "and the 'characters' read in pairs connectedly to the public, late in the discussion on the evening of Wednesday, July 13, the estimate of the audience was (and as Chairman I had unmistakeable evidence of it), that the only case out of six in which you could be said to have failed (as in my opinion you did fail) was that of the Workhouse-boy, privately marked 'A. A.' In each and all of the others you were considered remarkably correct, and the cheering was general." Dr Thorburne states also, that "Before the public meeting had terminated, a printed handbill was circulated in the room, headed 'Antiphrenology for the People,' and in which Mr Brindley added, that '*having disposed of Mr Rumball, whom he had met for five nights in debate,*' he the next night and following one would, among other points, shew, &c. In accordance with your request, the *premature handbill in question*, which was discovered to be in private circulation in the room, was read from the chair. The meeting then and there denounced it; and two of Mr Brindley's own committee expressed their condemnation of the extraordinary act of finesse, implied and proved, and which, I presume, does not need to be further characterized." A vote of thanks was passed to Dr Thorburne for his decision and impartiality in the chair. We may add, that it was an intelligent medical friend of our own who discovered copies of Mr Brindley's handbill in circulation, and led to the exposure by immediately drawing Mr Rumball's attention to the fact.

South Shields.—In June last, five lectures on Phrenology were delivered by Mr John Connon, editor of the *Tyne Pilot*, to the members of the South Shields Mechanics' Institution. The object of these lectures was to answer the questions, 1st, "What is Phrenology?" 2dly, "Is it true?" and 3dly, "If true, of what use is it?" The attendance was about a hundred; and, on the second night, the lecturer was assisted by Mr Thomas Stephen, surgeon, North Shields, who described the brain with the aid of some excellent drawings, executed by himself. Mr E. T. Craig, a professional lecturer on Phrenology, was present, and offered to examine the head of any person, unknown to him, that the company chose to submit to his inspection. One head was in consequence examined, and in relation to it, we are informed, "he made a very fair hit, and committed no actual mistake." A good deal of discussion on Phrenology took place. We are glad to understand that Mr Connon contemplates the delivery of a more extensive course.

Dr Conolly's Lectures at Hanwell.—We have much pleasure in recording the recent delivery of a series of clinical lectures in this Institution, with admission to what may be termed the practice of the Asylum. Great credit is due both to Dr Conolly for his exertions in bringing it about, and to the Visiting Justices for their boldness and liberality in consenting to the experiment, notwithstanding the numerous objections which were urged against it, and the prejudices which it had to encounter. It must be a source of great satisfaction to all concerned, to find that the experiment has succeeded so well, that no excitement appears to have been produced amongst the patients by the visits of the students, whilst the students have had an opportunity of acquiring, for the first time, much valuable information upon a subject, the study of which has hitherto been attended with so many difficulties.

The plan adopted with regard to the admission was, to give to each of the principal Metropolitan hospitals, the privilege of sending one of their more advanced pupils; thus at once reducing the number within the necessary limits, and, by having only senior pupils present, rendering it unnecessary to occupy any valuable time with the more elementary parts of the subject.

We shall refrain from noticing more particularly the lectures themselves at present, as we are not without hopes that Dr Conolly may be induced soon to publish them in some form or other, an address having been presented to him to that effect at the last lecture.—*Medico-Chirurgical Review*, July 1842.

Dr Foville's latest Researches on the Brain.—The inferences drawn by Dr Foville from his later researches, are, first, that the fibrous parts of the brain are conductors, some from without to within, others from within to without; that these conducting parts may be distinguished into afferentes and efferentes; that the distinct course of both the one and the other may be demonstrated; that the first are inserted especially into the circumference of the gray substance, and the second into its internal surface; that the afferent conductors are those fibres which are intermediate between the posterior parts of the spinal marrow, the optic and olfactory nerves, and the circumference of the convolutions, and that the efferent are those parts connecting the internal surface of the convolutions with the anterior pyramids: second, that the gray substance of the convolutions, intermediate between the two preceding orders of fibrous parts, seems to be the material substance through the instrumentality of which the will directs the movements of the body.—*Dr Streeten's Retrospective Address at the Meeting of the Provincial Medical and Surgical Association in August 1841.*

The Musical Speaking Voices of Friends.—To the Editor of the Phrenological Journal.—Sir, In No. 71 of Vol. XV. of your excellent Journal, there is a communication from Mr Hytche "On the Perception of Rhythm," which reminded me of some observations I have made connected with this subject, viz. that members of the Society of Friends have often very good organs of Time and Tone, and yet they rarely cultivate music; nor have they, until comparatively very lately, deemed it right to listen "to the harmony of sweet sounds" in musical composition. Yet the influence of the above organs appears to be manifested in their case, as their voices have often a musical intonation, which is commensurate to the proportionable development of the cerebral portions of Time and Tone. I will briefly describe the circumstance which indirectly induced me to take such particular notice of the organization of Friends. Many years since, when a boy, curiosity induced me to attend a funeral of one of this society at Ipswich, in Suffolk. A plain, unadorned coffin, containing the corpse, was placed on a table in the meeting-house, under the gallery where male and female ministers sat. The place was crowded, and for some time the silence of death made the scene particularly impressive; the stillness being only occasionally disturbed by a deep-drawn sigh, or a partial inspiration from some intruder like myself, tired of the ominous monotony. But our patience and attention were repaid. A female Friend (a minister) suddenly stood up, and in a voice musically sweet, and thrilling with devotional feeling, began a kind of recitative address with the words—"Behold our departed brother," &c. The cadences of her voice being marked with intervals and pauses as accurate as in the most musical composition, I was affected to tears, and even now the beautiful tones of her voice I can recall by a mere act of volition; and I am told, although more than thirty years have passed since this occurrence, that she still continues to excite pleasure in her addresses by her sweet and mellifluous tones. The lady I allude to is the benevolent Mrs Elizabeth Fry, celebrated for her philanthropy.

After studying Phrenology, and associating with many of the Society of Friends, I particularly noticed that those whose voices were musical, had the cerebral organization referred to before. I am, Sir, yours respectfully,

J. L. LEVISON.

9 Colmore Row, Birmingham,
April 19. 1842.

Case of Delahunt.—Wallington, Newcastle-on-Tyne, April 24. 1842.—To the Editor of the Phrenological Journal.—Dear Sir, In the Phrenological Journal, Vol. XV. p. 141 (New Series), is the case of John Delahunt, the murderer of a boy, by Mr John Armstrong, who, directly at variance with the development, states that Delahunt was a "responsible being," therefore a free agent, whilst Mr Armstrong's own shewing proves that he was a moral lunatic, as will be seen from what follows:—He states that amongst the "strikingly deficient organs" are "Philoprogenitiveness," "Benevolence," and "Conscientiousness;" amongst the large are "Combativeness" and "Destructiveness;" amongst the remarkably developed are "Secretiveness," "Acquisitiveness," and "Caution;" "Hope, Veneration, and Adhesiveness very full;" and "the organs of Reflection and Observation" only "full;" from the animal organs preponderating, a development well suited, when excited, to commit the very crime he was (unjustly according to the natural laws) executed for.

The temperament is not mentioned. It appears, also, in his confession, that "for a month previous to the commission of the crime, he was nightly oppressed with the feeling that he should commit murder;" "and he in-

tended it should be a child;" which shews his Destructiveness to have been in an insane state, and in choosing a child his great deficiency of Philoprogenitiveness and large Caution are exhibited. Some phrenologists are very anxious (quite at variance with the truths of the science they profess to believe in) to make human beings free agents: so long as the science is in accordance with Nature's laws, why should they wish to prop up a doctrine which has led to the greatest social misery and injustice? Benevolence, guided by reason, commands us to leave no absurd doctrines or customs unexposed, and to battle to the death, by example, tongue, and pen, in crushing opinions injurious to the welfare of our fellow-creatures, and unworthy (because untrue) of the rational.

No person can be a responsible being (strictly so called), without being a perfectly free agent, to be which requires a head with all the organs well developed, and equally balanced, all the temperaments in equal portions, and unvarying healthy action of all the mental, nervous, and other animal functions.

That human beings will become perfect, I have not the least doubt, but it will require all marriages to be formed on strictly phrenological principles for ever.

From what I have written, some persons might imagine that I think we are not responsible to society for our actions, but far from it; Phrenology teaches that those who commit any act injurious to the welfare of individuals or of society, should be placed in such a position (reformatory or otherwise) as would prevent the recurrence of such action; and amongst those who should be placed under restraint are seducers of females, who seduce but to forsake; debtors, who run in debt but to cheat their creditors; and duellists:—yet, owing to the irrational and immoral state of society, such persons (miscreants, as the believer in human free agency might justly call them), are allowed to mix unsullied amongst their fellow-creatures, and doubtless seeking for fresh victims. Faithfully yours,

ARTHUR TREVELYAN.

Phrenology and Insanity.—We have been favoured by Professor Mittermaier of Heidelberg with extracts from a letter by Dr Pier Francesco Buffa to Professor Benedetto Monti, physician to the Asylum of St Giovanni di Dio at Ancona, dated Genoa 10th April 1842, and published in the *Espero*, No. 20, under the title of "Remarks on the Lunatic Asylum of Genoa." We here present a translation of them:—

"After these remarks, I shall conclude with an exposition of my views concerning insanity, and the mode which I have followed in conducting its treatment—always uniting, however, my colleague's labours with my own. I am of opinion that the general management ought to be regulated according to the principles of association, and, therefore, that gentleness and freedom from unnecessary restraint ought to be combined with that perseverance which never allows itself to despair of benefit to the patient, and never abandons him to himself. I have always had recourse to the precept of a sound *pedagogia*, and of a moral hygiene, based on the science of Phrenology, which, more than any other psychological system, presents a complete exposition of all the affective and intellectual faculties, and enables us to explain all the various manifestations of man. I am not of the opinion of those who maintain that the phenomena of consciousness alone are sufficient to constitute man, for extensive observation has taught me that one or several of the intellectual faculties may be deranged, while the others remain unimpaired; and that in the same way reason and consciousness may be affected, while the affections and sentiments remain uninjured. Experience has made me a rational follower of Phrenology,

which assists me not only in discriminating partial and general mental affections, but also in curing them. I do not think, however, that every form of mental alienation always corresponds to the greater development of one or more of the cerebral organs. Every intellectual faculty, every sentiment and instinct, may acquire increased activity by disease, and become predominant in its manifestations without any corresponding predominance of the size of its organ. The mental equilibrium may be broken, and insanity become developed, simply by the dynamic or chemico-organic excitement of its cerebral organ." * * * "With regard to the employment of restraint, I think that the greatest possible freedom should be allowed, even at the expense of some occasional inconvenience. Rightly estimated, the inconveniences are always greatly inferior to the advantages accruing from it, and in this I entirely agree with the celebrated Ellis, physician to the Hanwell Asylum near London, which is considered one of the best in England." [Dr Buffa's opinion that the diseased organs are not uniformly the largest, is in accordance with that of all rational and experienced phrenologists. Where any organ predominates greatly over the rest in an insane person, the diseased manifestations will *generally* correspond. But this does not always happen, because a small organ may become intensely excited from disease, and one naturally predominant may nevertheless preserve its healthy tone.—ED.]

Love of Mathematics.—In the Rev. Charles Bridges' "Memoir of Miss Mary Jane Graham," p. 64, the following quotation from her writings occurs:—"But I am so carried away with my ancient mania for mathematics, that, although my head aches, and I cannot think without inconvenience of any thing, I am perpetually puzzling my brains to resolve questions which will never be of any use to me. It is said that every thing is given for some good. I cannot imagine why I have been endued with this invincible propensity to a study which is always diverting me from more useful and feminine occupations." Miss Graham's portrait displays, with Locality full, Form, Number, Individuality, and Comparison large, and Size very large. JOHN MORRISON.

London, 12th Aug. 1842.

Rumoured New Phrenological Association.—A correspondent of the *Lancet*, 13th August, p. 702, after stating that the present Association has been abandoned by Sirs George Mackenzie and William Baynes, Mr Serjeant Adams, Drs Browne, Moore, Forbes, and Andrew Combe, and Messrs Cox, Deville, Hytche, Cull, Streeter, &c., and that resignations are pouring in from all quarters, adds, that "it is, however, the intention of the seceders to form another society, from which the introduction of Materialism, Mesmerism, and that worst of isms Cliqueism, shall be excluded by a specific rule." So far as we are aware, no intention exists in any quarter to form a new Association.

Glasgow Western Academy.—We have perused with great satisfaction a report of the proceedings of a meeting held in the Assembly Rooms, Glasgow, on 10th August last, for the purpose of hearing opening addresses from Messrs R. J. Nelson and George Greig, the head masters of this new institution—the Lord Provost in the chair. In these addresses the objects of the institution are fully unfolded, and if these be well carried out, the inhabitants of the western districts of Glasgow will be enabled to give their sons a very sound and comprehensive education. We shall endeavour to insert in a future publication a considerable part of Mr Greig's address, which is the production of an enlightened and well-informed mind. In the seminary referred to, not only literary education.

but moral, religious, physical, and scientific, will be imparted ; and it is proposed to act upon the principle, that the faculties require to be *trained* as well as instructed. We wish the institution all success.

Vaudeville enacted in a Lunatic Asylum.—On the 20th of July, a vaudeville was performed at Bicêtre by the patients, and followed by a musical concert. The actors and musicians were trained by a young *artiste*, M. Florimond Rouger, who has devoted his services for some time past to the establishment. The play went off admirably, and the most perfect harmony reigned throughout the proceedings.—*Lancet*, 13th August 1842.

Addendum.—On p. 267 of this vol., line 27, after “Merioneth 82,” insert, “the proportion in England being 51.5; in Wales, 65.1; and in England and Wales united, 53.1.”

Books received.—Report of the Directors of the Glasgow Royal Asylum for Lunatics, 1842.—Medico-Chirurgical Review for July.—British and Foreign Medical Review for July.—Proceedings of a Public Meeting on behalf of the Assistant Tradesmen at Wolverhampton, May 27. 1842. Wolverhampton: Joseph Bridgen. 12mo., pp. 16.—Letters from Hefwyl, by a Parent, on the Educational Institutions of De Fellenberg.—Annual Report of the Belfast District Lunatic Asylum, 1842.—True and False Phrenology: Reprinted from No. XXVII. of the British and Foreign Medical Review.—Facts in Mesmerism, and thoughts on its Causes and Uses. By Charles Caldwell, M.D. Louisville, Ky. 1842. 8vo. pp. 132.—Cerebral Physiology and Materialism; with the Result of the Application of Animal Magnetism to the Cerebral Organs: An Address delivered to the Phrenological Association in London, June 20. 1842. By W. C. Engledue, M.D. With a Letter from Dr Elliotson, on Mesmeric Phrenology and Materialism.

Newspapers received.—Liverpool Journal, July 16.—Liverpool Courier, July 13.—Medical Times, July 9; Aug. 6, 13, 20, 27; Sept. 3, 10, 17.—Lincoln Standard, June 29.—Preston Chronicle, July 9, 23.—Glasgow Argus, Aug. 11.—Tyne Pilot, Aug. 19.—Sunderland Herald, Aug. 12, 26.

To Correspondents.—The length of our report of the proceedings of the Phrenological Association, has prevented us from inserting in this Number the communications of Messrs Beamish, Lowe, and Hytche. Several short articles and notices of books are likewise deferred.—The paper on Conscientiousness, by Mr W. Hancock jun., must, we fear, be declined, but shall be farther taken into consideration.—The writer of a communication on Memory, dated Sheffield, July 1842, will find, on consulting the elementary works on Phrenology, that the opinion for which he argues is the one generally held.

Communications for the Editor (prepaid) may be addressed to Mr Robert Cox, 25 Rutland Street, Edinburgh. Books or parcels, too heavy for the post, may be left (free of expense) with the London publishers, Messrs Simpkin, Marshall, & Co., Stationers' Hall Court.—Articles intended for the next following Number must always be with the Editor six weeks before the day of publication. Communications for the section of “INTELLIGENCE,” and also advertisements, should be in hand at least a fortnight before the same day. Charges for advertising:—eight lines, 6s.; twelve lines, 7s. 6d.; every additional line, 6d.; half a page, 14s.; a whole page, 25s. Advertisements may be sent to the publishers in Edinburgh or London.

EDINBURGH, 1st October 1842.

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